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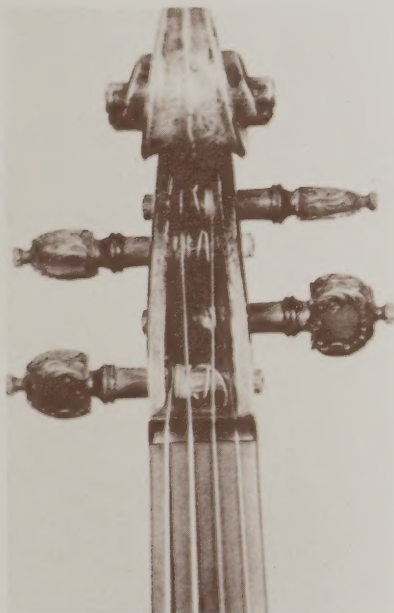
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A  
HISTORY OF THE GUITAR,  
FROM  
THE EARLIEST ANTIQUITY  
TO  
THE PRESENT TIME;

INCLUDING

A SKETCH OF THE DIFFERENT EXPERIMENTS THAT HAVE SUCCESSIVELY BEEN MADE IN ITS CONSTRUCTION, AND  
A FULL EXPLANATION OF THE CHARACTER  
AND MERITS OF

**TILTON & CO.'S**  
**PATENT IMPROVEMENT,**

WHICH CAN BE ATTACHED TO THE INSTRUMENTS OF ANY  
OTHER MAKER.

BY JAMES BALLARD,  
PROFESSOR OF THE GUITAR, NEW YORK; AUTHOR OF THE  
"ELEMENTS OF GUITAR PLAYING," ETC.

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NEW YORK:  
WILLIAM B. TILTON & CO.,  
18 BEEKMAN-STREET.  
1855.

"It is the highest test and proof of the genius of the Italian that in all ages it has been regarded with partiality and even affection. \*\*\* It is an instrument capable of every possible variety of tone, expression, and modulation; it has, for more than three thousand years, held an uncontrolled dominion over the best feelings of human nature; and it now reigns favorite over the greater part of Europe and the Western world."

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# HISTORY OF THE GUITAR,

ETC., ETC.

## I.—ORIGIN OF LYRIC INSTRUMENTS.

THE origin of the *lyric* class of musical instruments, of which the *guitar* is a modern variety, may be traced, by records on Egyptian monuments, to a period of very remote antiquity; and it is perhaps an evidence of the importance attached to such instruments and that they were identified with the social habits as well as the religion of the earlier races, that the origin of the lyre is even carried back to the fabulous age of mythology. It is stated that "the Nile having overflowed its banks at the periodical time for the rise of that wonderful river, on its subsidence to its usual level, several dead animals were left on the shore, and amongst the rest a tortoise, the flesh of which being dried and wasted in the sun, nothing remained within the shell but nerves and cartilages, which, being tightened and contracted by the heat, became sonorous. Mercury (the



Egyptian Hermes), walking along the banks of the river, happened to strike his foot against this shell, and was so pleased with the sound produced, that the idea of the lyre suggested itself to his imagination. The first instrument he constructed was in the form of a tortoise, and was strung with the sinews of dried animals."

Ancient writers do not agree with respect to the shape of the lyre, some contending that, instead of the shell of a tortoise, it resembled the front part of the head and horns of a bull. Most probably its shape varied according to the taste or caprice of the maker, or the nature of his materials.

The most generally received idea of a lyre is, an instrument, played in an upright position, with from three to seven strings, free on each side, attached to a frame, which therefore assimilates with the *harp* kind, and is, no doubt, the forerunner of that ancient and splendid instrument, traces of which still remain to prove that it was used, under different names, in India, in Egypt, among the Hebrews, in Italy, by an ancient people named *Arpe*, among the Scandinavians, and in ancient England and Ireland.

We read in the Scriptures (2 Sam., vi. 5) that "David, and all the house of Israel, played before the Lord on all manner of instruments made of fir-wood; even on harps, and on psalteries, and



on timbrels, and on cornets, and on cymbals ;” but the various translators of the Bible all differ as to the meaning of the terms applied to the musical instruments of the sacred volume. The nearest approach to the guitar seems to have been the *cinnos*. It had a hollow belly, or sounding-board, over which were passed sometimes six and sometimes nine strings, which were struck from the top to the bottom, either by a small bow or fret, or with the fingers. The *sambuc* is supposed to have resembled the modern psaltery. The Hebrew *psaltery* was laid flat, and struck either with a plectrum or the fingers.

There is, however, so much confusion among ancient writers with respect to the *names* of musical instruments, that the only way to attain a clear idea of them is to trace them according to the *descriptions of their forms*.

## II.—VARIETIES OF THE LYRE.

*Lyre* and *cithara* were originally synonymous terms ; but about the time of Pindar (550 B. C.) innovations had made these instruments distinct. The *lyre* had a large and full-sounding body, generally made of tortoise-shell, from which the horns rose as from the head of a stag : a transverse piece of wood, connecting the two horns near their top ends, served to fasten the strings. These

instruments were often adorned in the most costly manner with gold and ivory. The lyre, when played, stood in an upright position *between* the knees.

The *cithara* had a smaller body, shorter strings, drawn across the body like a guitar, and was placed *on* the knees or in the lap of the player.

The lyre and cithara were both used as an accompaniment to the voice.

That there were in after times several instruments nearly resembling the lyre, is proved by Quintilian, who says, that "among the stringed instruments, you will find the *lyre* of a character analogous to masculine, from the great depth or gravity and roughness of its tone; the *sambuca* of a feminine character, weak and delicate, and, from its great acuteness, and the smallness of its strings, tending to dissolve and enervate. Of the intermediate instruments, the *polyphthongum* partakes most of the feminine; but the *cithara* differs not much from the masculine character of the *lyre*."

Thus there appears to have been a scale of stringed instruments, which ranked in the order of *lyre*, *cithara*, *polyphthongum*, and *sambuca*.

In comparing a figure of an ancient tortoise lyre with several Greek and Roman ones, it will be seen that the latter instruments have *larger bodies* than the ancient one—a fact indicating a gradual tendency to a more powerful tone. (See plates.)

## III.—STRINGED INSTRUMENTS OF THE LUTE KIND.

The next variety in the lyric class of instruments may be called the *lute* kind. It comprises the addition of a neck or finger-board, upon which the strings are pressed in various places, in order to modify their tones,—and the hollow bodies have convex backs, some like the shape of part of a citron, pumpkin, or gourd; others like half of a split almond. Traces of the lute kind of instruments are to be found among the sculptured remains of ancient Egypt.

On an obelisk, supposed to have been erected at Heliopolis by Sesostris, about A. M. 2411, near 400 years before the Trojan war, and brought by the Emperor Augustus to Rome, where it now lies broken in the Campus Martius, there is a representation of a *dichord*, a musical instrument with *two* strings and a *long neck*, very much resembling the *calascione* still in common use throughout the kingdom of Naples. The shape of this instrument was considered by Dr. Burney as an evidence that the Egyptians “had discovered the means of extending their scale, and multiplying the sounds of a few strings by the most simple and commodious expedients.” If the two strings were tuned fourths to each other, they would furnish a *heptachord*, or B, C, D, E; E, F, G, A; and if tuned fifths, an *octave*, or B, C, D, E; F,

G, A, B,—an advantage none of the Grecian instruments seem to have possessed for ages after this obelisk was erected. As, according to Proclus, “the Egyptians recorded all singular events and new inventions upon columns or stone pillars,” this may be considered as the earliest known record of the existence of the *dichord*, one of the progenitors of the *guitar*.

Among the engravings furnished by M. Denon from the royal sepulchres west of Thebes, and from the temple of Dendera, is a representation of a female playing upon an instrument resembling the *theorbo*. It appears to be tuned by means of pegs like the modern violin, and is evidently played with the fingers. In another picture, a performer has an instrument with *four* strings, exactly resembling a *guitar*, except in the neck, which is much longer in proportion to the size of the instrument. From the increased number of the strings, it is doubtless of a comparatively later date.

It has been generally supposed that musical instruments having a neck or finger-board by which to regulate the length of the strings were unknown to the Greeks; for Montfaucon, in examining the representations of near 500 ancient lyres, harps, and citharas, says he “never met with one in which there was any such contrivance for shortening strings, during the time of performance, as a

neck and finger-board." Several examples, however, have since been discovered.

In a Greek manuscript of A. D. 200, there is a drawing of an instrument with a long fretted finger-board and neck, of the same form as the Egyptian *dichord*.

In plate No. 3, vol. i., of Doni's work, there is an engraving of a kind of guitar. It has a neck, finger-board, and tail-piece exactly like those of the mandora, and *eight* frets; but the body, instead of being almond-shaped like the mandora, is circular, and apparently flat on both sides: it has *eight* strings.

No. 1 of the same plate represents a young female (winged) sitting upon a kind of chair with a high back, and playing upon a musical instrument of the guitar kind. She is stopping the strings with her left hand, while striking them with the plectrum in her right, and appears to be singing at the same time. The body of the instrument rests in her lap, and is of a truncated oval shape. Both the examples in the plate are from ancient marble sarcophagi found in the Via Appia anno 1732.

On another sarcophagus, an instrument exactly like the Spanish guitar is sculptured. The strings are apparently nine in number, and the frets ten.

Among the Townley marbles in the British Museum, on a sarcophagus, on the front of which

various figures of Cupid and Psyche are exhibited, may be seen a representation of a guitar [lute]; the length of the body being equal to about one-third of the neck, and its breadth rather less. Five or six strings may be traced on the finger-board, and there appear to be pegs at the end of the neck. The hands of the player are applied very gracefully to the strings.

Among the Greeks and Romans, and in general among all the nations of antiquity, both of the East and the North, stringed instruments played by snapping held the first place; and those who played upon them were regarded as most worthy of commendation among musicians.

The Turks have among their stringed instruments one called the *tambour*, which has eight strings, and a long neck, on which the scale of tones is marked. It is played upon with a small flexible plate of tortoise-shell. They have also another called the *santur*, or psaltery, like our instrument of the same name; and the *canun*, or psaltery, with cat-gut strings, on which the ladies of the seraglio play with a tortoise-shell plectrum.

The *balaika* is a very ancient instrument, in common use amongst the Russians and Tartars; and Niebuhr says it is used both in Egypt and Arabia. The body is an oblong semicircle, about a span long, with a neck or finger-board. It has only two strings, or wires, and is played on like a



guitar. One of the strings gives a monotonous bass; the other plays the air.

The Georgians have a sort of guitar which is played on with a bow.

The most remote traditions of the Chinese refer to Fo-Hi, their first prince (supposed to be contemporary, if not identical, with Noah), as having "made a beautiful lyre and a guitar, adorned with precious stones, which produced a noble harmony, curbed the passions, and elevated man to virtue and heavenly truth." They believed that the *kin* of Pin-mea-ko-tar excelled the lyre of Amphion.

Such hyperbolical accounts are useful, as indications of an enthusiasm and love for music, which they considered "the science of sciences." Dr. Burney says that the favorite instrument of the men is something like a guitar [lute], the body of which is formed of a gourd or a pumpkin, and the strings of twisted silk; and modern works on China allude to the skill with which the ladies play on the *tsin* and *kitar*, and the length of their finger-nails, upon the grooves of which they sometimes fasten a brass artificial nail, using it as a plectrum.

The Siamese *tuk-kay*, so called from its resemblance to a lizard, is composed of hard wood, inlaid with mother-of-pearl. It has a hollow body, with three sounding-holes in the back. Three strings—one of brass wire, the others of silk—ex-

tend from one end of the instrument to the other. They are tuned by means of long pegs; and the performer, pressing his left hand on the strings, strikes them, at proper distances, with the forefinger of the right.

The Burmese *patola*, or guitar, is fantastically shaped like an alligator.

Among the ancient musical instruments of India, a prominent one is the Hindoo *been* or *vina*, which is considered to be the Eastern type of the lute, or Spanish guitar. It has a bamboo body, attached to two large gourds, and is mounted with several strings, which are pressed on bridges [frets] with the fingers. The style of its music is, in general, that of great execution.

The Hindoos have also a more modern instrument called the *tamboura*, which has a body formed of a gourd, with a long neck or finger-board, and three strings, two of which are tuned in unison, and the third an octave below. They are struck with a plectrum shaped like a heart.

In M. Taugoin's work on Persia, an engraving represents two female figures playing before the Sultana; one on a kind of tambourine, and the other on a guitar. And Kotzebue, in the description of an entertainment of dancing, says: "Their music consisted of a guitar, a sort of violin with three strings, two tambourines, and a singer."

The Arabians attribute as many marvellous

effects to their *oúd*, or *aoúd*, which resembles a lute, as the Greeks did to the *lyre* of Amphion, or the Chinese to the *kin* of Pin-mou-koi. "They tell you, with the utmost gravity," says M. Ginguene, in the *Encyclopédie Méthodique*, "that each of the strings of this instrument, four in number, has particular virtues. The first, for instance, acts as a specific against bile and phlegm; the second is a sovereign cure for the most inveterate melancholy and vapors; the third gives health and vigor to young people of both sexes; and, lastly, the fourth string affords relief, the instant it is heard, to a sanguine temper and disposition." But the power of these strings depends greatly on the mode in which the performer touches them. "They have," says the same author, "a particular *pizzicato*, or touch, for every action and passion. Courage, liberality, and noble sentiments are inspired by one mode of touching; love and pleasure by a second; the dance is inspired by a third; sleep and tranquillity by a fourth." These fancied effects, which seem so incomprehensible to us, are perhaps evidences of a more minute sensibility, particularly when we remember that the Arabian scale contains twenty-four quarter-tones in the octave.

Another instrument of the Arabians, called the *rahab*, has a body shaped like a tortoise, a round neck, and three strings, and is played with a bow.

The *tambour* is a species of mandolin (see sequel), with a long neck.

The Abyssinians say that three of their musical instruments, the *sistrum*, *lyre*, and *tambourine*, were brought from Egypt. The lyre has five, six, or seven strings. The guitar is seen in the hands of Mohammedans in Abyssinia; but they brought it from Arabia.

The inhabitants of Congo have a lute of a singular kind. The body and neck resemble ours, but the belly is of very thin parchment. It is strung with the hair of an elephant's tail, or the bark of the palm-tree. The strings reach from one end of the instrument to the other, and are fastened to rings. Small iron and silver plates are fastened to these rings; and when the whole is put in motion by striking the strings, it produces an agreeable murmuring harmony.

The people of Empoöngwa have an instrument called the *enchambee*, resembling the mandolin. It has five strings, made from the root of the palm-tree. The neck consists of five pieces of bamboo, to which the strings are fastened, and, slipping up and down, are easily but not securely tuned. It is played with both hands; and the tone is sweet, but not powerful.

In Fellatah, the best kind of musical instrument is a species of guitar or violin, formed of a calabash, with horse-hair strings.

Some of the African tribes use the *banjore*, a stringed instrument of the tambour kind, whence our present *banjo*. It is played by striking it with the fingers.

The ancient Peruvians, among their musical instruments, had a kind of guitar, called a *tinga*, which had five and sometimes six strings.

Among the Moors of Sahara, we are told by Mollien, that "notes, tolerably harmonious, produced from a rudely-fashioned guitar, and languishing songs, would make you imagine, when present at their concerts, that you were among Spanish musicians." As the Spanish and Moorish music were both derived from Arabia, this coincidence is easily accounted for.

The European *lute*, which had its Asiatic type in the Arabian *oud*, imported by the Moors of Spain, has served as a model for many derivatives more or less complicated.

The body of the *lute*, convex on the back, and flat on the other side, had a broad finger-board, furnished with *ten* frets. It was mounted with eleven strings, nine of which were double, three tuned in unison, and six in octaves. The first two, or *chanterelles*, were single. Berard and the two Gualtiers made themselves celebrated by their performances on it in the seventeenth century.

The *archilute*, an imitation of the lute, of much more considerable proportions, and mounted with

a greater number of strings, had more volume of tone; but the large size of its finger-board, rendering it very inconvenient to the player, caused its use to be abandoned.

The *theorbo* was also a kind of lute, with two finger-boards parallel to each other. The smallest was similar to that of the lute, and bore the same number of strings; but the second, which was much larger, sustained the last eight strings, which served for the bass.

The *pandore* had the same number of strings, and tuned in the same manner, as the lute; but instead of cat-gut, they were made of metal. The back of the *pandore* also, instead of being convex, was flat.

The *mandore* was like the lute, but it had only four strings, tuned from fifths to fourths. The highest string was sometimes lowered a note in order to obtain other chords. Both the *pandore* and *mandore* were in great favor about 1710; but they have gradually gone out of use.

The *mandolin* is a small instrument of the lute kind. The body is round, like the lute, but the finger-board is more like that of the guitar. The mandolin is held in the left hand, and the sounds are produced by means of a quill held between the thumb and fore-finger. The four strings are tuned in unison with those of the violin. In Italy there are mandolins with three, and others



with five strings, which are variously tuned, according to the caprice of the player.

The *calascione*, a little instrument with a very long neck, used by the Neapolitans, is a peculiar kind of mandolin, which is also played with a quill. It is generally mounted with three strings, but sometimes has only two.

That the lute kind of instruments held the first place in chamber concerts in the sixteenth and seventeenth centuries, can be proved by reference to the paintings of Titian and other artists of the Italian school, which continually represent groups of singers either using or being accompanied by some instrument of the above description.

#### IV.—THE GUITAR.

From early records it seems that a rude kind of *guitar* was used in Great Britain and Ireland in very ancient times. Perhaps introduced by the Romans or Saxons.

Strutt, in his "Saxon Antiquities," gives figures of *guitars with large bodies and short necks*, from which, no doubt, originated the English guitar.

In plate No. 32 of Gerbert's work, there is a representation, from a manuscript of the sixth century, of a musical instrument of the guitar kind, with seven strings, called the *Cithara Teutonica*; and in plate No. 26 of the same work

there is also a figure of a person playing upon a *Lyra Teutonica*, with five strings, resembling in form the Spanish guitar.

From the time of its introduction among the Spaniards by the Moors, about A. D. 725, when it was a simple instrument, with four strings, up to the present day, during which interval its cultivation has gradually spread over the whole of southern Europe and its foreign dependencies, the *guitar* has been a favorite with the most celebrated artists, poets, and musicians. In Spain and Portugal it is essentially a national instrument; and it is stated as an historical fact, that the Portuguese having once lost a battle, fourteen thousand guitars were afterwards found on the field.

"The guitar," says a writer in Blackwood, "is the natural instrument of a people like those of the Spanish Peninsula. Its lightness, yet tenderness—its depth of harmony, yet elegance of touch—its delicacy of tone, yet power of expression—adapt it to a race of men who love pleasure without wishing to toil in its pursuit."

"There are few Spaniards," says Stafford, "who do not play upon the guitar; and in the provinces there is scarcely an artificer who, when his labor is over, does not go to some of the public places, and amuse himself with this instrument. Take the Andalusian peasant, for instance, who, after a

hard day's labor, instead of resorting to the glass or jug for refreshment and relaxation, tunes his guitar, and exercises his voice. Night comes on, and the song begins. He and his companions in toil form a circle, and place at the head, for the orchestra, the Spanish national instrument. Each of the assembly sings a couplet, always to the same air. Sometimes they *improvise*; and if there be among them any who can sing a romance, which is not uncommon, he is listened to with religious silence."

The guitar was first introduced into France soon after A. D. 1000, when it was called *guiterne*. In 1375 it was in common use. Before 1400, Chaucer alluded to the *citern*. (Fr. *guiterne*.) In 1552, there was published, at Salamanca, a tablature for the guitar by Pisado. In 1578, Le Roy's tablature for the same instrument was made public. About 1600, Cervantes made mention of the guitar in *Don Quixote*. In 1626, music for the Spanish guitar was indicated by figures.

The body of the guitar is at present flat on both sides, and the finger-board is divided by frets for the placing of the fingers. To the original four strings the Spaniards added *one*, making the five A, D, G, B, E; and in 1788 the Germans added the sixth, or deep E string, for the Duchess of Wiemar. In some parts of Spain and Italy, a

seventh string (B) was also added; but the increased width of the finger-board, like that of the old lute, was found to be cumbrous.

#### V.—VARIETIES IN THE CONSTRUCTION OF THE GUITAR.

With respect to the varieties of form to which the body of the modern guitar has been subjected by different nations, it may be observed that the Spanish pattern more nearly resembles a parallelogram than any of the others; the curves at the corners of the hoop being more sudden in the bend, and the narrow part near the rosette deviating but little from a straight line. Its general outline seems to affiliate with the style of Moresco architecture.

The French, Italian, and German patterns are generally of a graceful form, and are more circular than the Spanish. Among the French guitars, perhaps the most symmetrical are those made by *Lacote*; while that known as the *Legnani* pattern, having a close resemblance to a depressed figure 8, is the most peculiar among the Italian and German instruments. The Italian bodies were, for a long time, considered the best.

A number of experiments have, from time to time, been tried by different makers in the construction of the guitar.

1. The width and length of the body have been enlarged, and also reduced.

2. The depth of the body has also been made of different proportions.

3. The rosette, or sound-hole, has been placed in different parts, and even at the lower end of the sounding-board.

4. An oblique extra sounding-board has been inserted between the rosette and the shoulder of the guitar.

5. An entire extra sounding-board has been attached to the hoop, without any communication through or around it.

6. An extra sounding-board has also been inserted, with a space around it, and a small vent-hole in the back of the guitar.

7. The strings have been fastened to a tail-piece, and passed over the bridge.

Some years ago, an instrument, called the *harp-guitar*, with the hollow body reaching to the floor, was partially introduced in this country; but having to be supported between the knees of the player, its appearance was not considered graceful, and the elevated position of the left hand was inimical to rapid execution.

In 1843, Madame De Goñi brought to New York a large pattern Spanish guitar, from which a number have been made, and distributed over

the United States, by Martin, of Pennsylvania, and Schmidt and Maul, of New York.

In 1846, M. Ferranti, guitarist to the king of Belgium, brought with him a guitar of a large circular form, something like the Legnani pattern. It had an extra sounding-board, of the kind mentioned in experiment No. 6. The instruments made from this model have almost exclusively been made by Schmidt and Maul.

The next novelty was the *Plus-Harp Guitar*, or *Bewitcher*, introduced at a concert by Signor Jose Gallegos, May 15, 1852, at the Metropolitan Hall, New York. It was a beautiful specimen of workmanship, and had additional open bass strings, besides a diatonic and chromatic scale of open strings attached to the sounding-board. While playing, it was supported by a stand similar to Aguado's Tripodion. No copies were made in New York. Its tone was not very powerful.

In 1853, Mr. Napoleon W. Gould, the well-known and talented guitar-player of Christy's Minstrels, exhibited at the Crystal Palace, New York, a guitar of his invention, which, by means of a movable nut, lowered the entire pitch of the instrument a semitone, and enabled the performer to play in flat keys with exactly the same fingering as that for the sharp ones.



## VI.—CHARACTER AND MERITS OF THE GUITAR.

It has been said of the guitar that its forte is the *picturesque*; meaning thereby the presenting of pictures *des tableaux*. Such was evidently the opinion of a popular author, when he wrote the following passage in one of his historical novels. The instrument alluded to is a kind of guitar with eleven strings, which was very much in vogue in France about the time of Henri IV.:

“He paused, and seemed to give a moment of sad thought to the sorrows of his native country; then suddenly dashing his hand over the chords, he made them ring with a loud and peculiar air, so marked and measured, that one could almost fancy one heard the regular footfalls of marching men, mingled with the sounding of the trumpet and the beating of the drum. Then joining in his clear melodious voice, he sung of the dreams of glory and of patriotism wherewith the soldier on his way warms his heart to battle, and conceals from his own eyes the dark and bloody nature of the deed itself. Then, again, the chords of the instrument, with a quicker movement, and more discordant sounds, imitated the clang and clash of charging hosts; and the deep and frequent tones of the bass might be supposed to express the roar of the artillery; while still, between, came the notes of the clarion, and sounds that resem-

bled the distant beating of the drum. At the same time the voice of the youth, in few but striking words, and, as it were, with brief snatches of song, called up the images more forcibly, and aided imagination in supplying all that the scope of the lute could not afford. Gradually, however, as he sung, the louder sounds were omitted; the imitation of the trumpet changed from the notes of the charge to those of the retreat; the strings seemed to rustle under his touch, as if from the hasty rush of flying multitudes; and then, with a sudden change of time, the music altered to a sweet and plaintive strain of wailing, while his voice took up the song of mourning for the dead." The effect of this performance was like "a painting addressed, not to the eye, but to the ear; and that not with words, which, with laborious minuteness, describe insignificant parts, without conveying effectually grand impressions; but with sounds which, rousing fancy's greatest powers at once, called up all the splendid pageantry of imagination to complete for the mind's eye the grand pictures that those tones suggested."

The following extracts also elucidate the character and merits of the guitar:

"The strongest position which an advocate for the guitar will insist upon, and on which he will never fail of convincing, is most undoubtedly that on the point of harmony. In this respect, in its

facilities of developing the most intricate combinations of harmony, it excels all other instruments, the pianoforte alone excepted."

"What the pianoforte is to an entire orchestra, the guitar is to a quartett of instruments; what the former possesses in power, the latter has in sweetness; the force of the one is counterbalanced by the variety of the other. If that instrument which can be the representative of the greatest number of sounds is to be considered the best, the pianoforte has then the decided advantage over every other. But there are many points in which the preference may be fairly given to an instrument of less compass, which, possessing within itself peculiar powers and advantages, retains many of the good qualities of the fine instrument we have mentioned. This is precisely the case with the guitar. Indeed, we will go farther, and say to the player of the one instrument that he should cultivate the other. We are none of those who are exclusively prejudiced in favor of any one instrument, nor would we recommend our readers to be so, as it narrows the judgment and cramps the means, which are easily available, of enlarging the field of the perceptive powers of their enjoyment. For these reasons we would recommend the pianist's attention to the guitar; for the nature of stringed instruments is so little understood by them, and forming, as they do, the leading feature

of all orchestral accompaniments, a knowledge of them would teach pianoforte players their specific properties, and enable them to appreciate their combination in relation to each other, as well as to the human voice."

It used to be objected against the guitar that it had a tinkling, twanging tone; but this objection, originally made when the Spanish guitar was strung with double wires, had more force then than it has now. By the modern adoption of spun and covered strings, and by placing the right hand at a proper distance from the bridge, a fine, clear, harpy tone can always be produced from a good instrument, calculated to satisfy the most fastidious ear.

Who that can remember the wiry tones of the old *spinnet*, or even the effects produced from the small pianofortes of thirty years ago, would think of applying the same epithets that belonged to those instruments, to the full round tones of the majestic and almost ponderous pianofortes of the present day? And yet just as absurd is the practice of those who endeavor to stigmatize the modern guitar as a tinkling or twanging instrument.

"The dominion which the guitar has held over the feelings of mankind, from the earliest ages to the present time, is evidence sufficient that it is not to be banished from the world by a few dogmatical assertions or satirical epithets. Against

the dissenting few, we have the millions many: the majority of the world is in our favor; and poetry and painting have equally vied in perpetuating and celebrating its praise."

In the opinion of Mr. Aguado, "the guitar possesses a character which is distinct from that of any other instrument. It is *succet*, *harmonious*, *pathetic*, sometimes *majestic*. It does not approach to the grandeur of the harp or the piano-forte; but, in compensation, it possesses those delicate modifications of tone that render it an almost *mysterious* instrument."

None of these effects, however, can be produced from an inferior guitar; and the same author further says, that "the possession of the greatest talent by a guitarist will be of no avail with a guitar which has a poor tone, frets badly placed, is mounted with strings that are worn, of a bad quality, or disproportionate thickness, or which is hard to the touch, or of a bad shape or make."  
... "The artist will have so much the more success as his guitar is better in quality."

That there are in the United States several excellent guitar-makers—men who devote themselves to their art with zeal, patience, and ingenuity—is a matter of congratulation to those guitarists who possess their instruments; but, unfortunately for amateurs in general, and professors in particular, a large number of inferior instruments are in cir-

ulation, from which it is literally impossible to produce any thing but a miserable caricature of guitar effects.

These inferior instruments, well worth the original price given to their cheap manufacturers, are frequently made of showy wood, finely polished, and, to an uninitiated purchaser, *seem* to possess all the external essentials of a good guitar; but a connoisseur will soon detect inaccuracies in their proportions, and faults in their construction, which easily account for the inefficient results that are obtained from them.

Among the principal faults likely to occur in an inferior guitar, may be enumerated the following :

1. Wood of an improper quality and grain, and not sufficiently seasoned.
2. A wrong inclination of the finger-board.
3. Want of exactness in the adjustment of the frets.
4. Disproportion in the height of the nut and bridge, which has a bad influence on the tone.
5. No compensation at the bridge for the depression of the strings.
6. No allowance at the nut or bridge for the peculiar quality and extra resistance of the silver strings.

From an instrument having any of these imperfections, it will be impossible to elicit the proper attributes of legitimate guitar-playing; and if



these defects cannot be surmounted by a good player, it is not to be wondered at that beginners, after learning a few chords, often give up the guitar in disgust, and eventually join the ranks of its enemies.

It has been thought necessary to allude to the objections in the present section, because it is firmly believed, that the adverse opinions which exist concerning the merits of the guitar are mainly to be attributed either to the inferior quality of the instruments in general use or to some defect in the manner of playing upon them.

Seeing, then, that the success of a guitarist depends so essentially upon the quality of the instrument in use, it will be well first to enumerate, and then comment upon, some of the requisites which a good guitar ought to possess, in order that an amateur may be better enabled to form a correct judgment in selecting one.

## VI.—QUALITIES OF A GOOD GUITAR.\*

1. A resonant tone, of an equal quality throughout the scale.

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\* As the subjects in the following section have already been written upon by Messrs. Sor and Aguado, we have thought it best, on account of the authority they carry with them, to incorporate several of their opinions, so far as they apply to the mechanism of the guitar at the present time.

2. An accurate adjustment of the frets.
3. Strings of a suitable size and weight.
4. A very slight elevation of the strings above the finger-board.
5. A proper proportion in all the parts, especially the neck and finger-board.

1. *Tone*.—The tone of a guitar depends upon so many conditions in the construction of the instrument and the adjustment of the strings, and is so variously estimated by different tastes, that it is difficult to give a definition that will suit all parties of what constitutes a *good tone*. Some amateurs prefer a *soft, singing, inward tone*; while others, and the generality of professors, incline to a *brilliant tone*, with *as much power* as the instrument will admit of.

A peculiar adaptation of some of its parts, together with a corresponding proportion in the strings, will enable a skillful maker to furnish a guitar that will suit the requirements of every taste.\*

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\* "It is not sufficient that an instrument be well constructed; the strings must be of a suitable size for it, and must be tuned to the pitch answering to its dimensions, in order to judge of the quality of its tone. The guitar-maker, Manuel Martinez, of Malaga, on receiving an order for a guitar, after having made a note of the dimensions desired, always asked—'Do you string it with large or small strings? Do you like a silvery or a soft tone?' And he regulated his proceedings according to the answer."—*Sor's Method*.

The bridge (says Mr. Aguado) is a very essential part, and greatly influences the tone. There are several kinds, of which *three* are the principal. The most common in Spain consists of a four-sided piece of hard wood, pierced in its thickness, and parallel to the sounding-board, with six holes, to which the strings are fastened by means of a ring. The second is of modern invention. It is also quadrilateral, having on its upper side a deep groove, which divides it into two unequal parts—an outside one pierced through for fastening the strings, and an inside one on which the strings rest as on a nut. The third kind, and which is at present the most common in France, is four-sided, and pierced perpendicularly to the sounding-board with six holes; a large knot is made at the end of the string, which is passed through the hole, and fastened by means of a little plug, hollowed out on one side, which fills up the hole. The advantage of the two last kinds is, that *the strings vibrate between two solid points, and that they all start from the same straight line*. The bridge with plugs has this inconvenience, that it is necessary to *pierce the sounding-board*, which often becomes worn away by the constant action of the knots.

2. *Frets*.—If the frets should be incorrectly placed, however satisfactory the general *tone* of the instrument may be, it will *always be out of tune*. It will therefore be indispensably necessary

for the maker to have a correct scale for placing the frets, which ought to be based upon the system of *equal temperament*.

The distance from the nut to the first fret should be nearly one-eighteenth of the length from the nut to the bridge; the same fraction of the distance from the first fret to the bridge gives the place for the second fret; and continuing the operation will give the places for all the other frets. By this measurement, the frets will gradually diminish towards the twelfth fret, which must form a perfect octave in consequence of being placed at exactly one-half of the distance between the nut and the bridge.

The height of the frets should also be regulated, so that a stopped string only touches one fret at a time; otherwise, the tone of the stopped note will have that disagreeable quality called *buzzing*.

The enemies of the guitar often assert that "it would be a delightful instrument if it were only in tune;" but such an observation either betrays ignorance of the laws of its construction, or an unfair argument based upon the effects produced from a bad instrument. The intonation of a *properly-constructed* guitar, with *correct strings*, being based upon the system of equal temperament (the same as the modern Böhm flute, which is now so much praised for the purity of its intonation), there is really no room for any objec-

tion on this head, since the intonation of a well-made guitar ought to be just as correct as that of the Bœhm flute.

3. *Strings*.—The vibrations of the strings are regulated by *length, tension, thickness, and weight*.

In forming a diatonic scale upon a single string, we see that the sound grows *sharper in pitch* in proportion as the string is *shortened*; in other words, that the intonation depends upon the adjustment of the string to different *lengths* by means of the frets: hence the necessity for having them placed mathematically correct.

With respect to *tension*, it may be observed that the more the string is stretched, the sharper will be the sound. There is, however, a certain degree of tension which is best adapted to a fine tone. Below this degree, the tone will be deficient in intensity; and above it, in consequence of the extreme tightness of the string, the tone will be hard and dull. In the latter condition, also, the string will have a tendency to break.

A perfect equality of length, tension, and weight being supposed, the string which has the *greatest thickness* will produce the *deepest sound*. The three spun strings are therefore graduated in proportion to the distance of tone between them. There is also a certain degree of thickness which is best adapted to a fine tone; and beyond this

degree, the same defects will occur as in the case of disproportionate tension.

In order to produce sounds below the open G upon a fourth string of the same spun quality, its diameter would have to be increased to such an extent that the tone would be hard, dull, and totally devoid of resonance. As the *weight*, however, compensates for the diameter of a string, the difficulty is overcome, and a brilliant tone obtained, by substituting a different material for the fourth string, viz., silk, covered with silver wire. With this compound material, the diameter of the fourth string is really less than that of the third; and the fifth and sixth strings being made in the same manner, it is only necessary to enlarge their diameters in proportion to the distance of tone between them.

The fine quality of tone of the silver strings depends *more on the weight than on the thickness*. As little silk should be used as possible, and that of the best quality; while the wire should be as thick as it can well bear.

When all the strings are well made, and even, the vibrations have a smooth and regular form, and the tone is proportionally pure in quality and correct in pitch. When a spun string has any inequality or speck in the course of its length, it will be *false* in the intonation. To try a string, a portion equal to about twenty-five inches is to be

taken between the fore-finger and thumb of each hand; then giving it a certain degree of tension, it is to be struck with one of the fingers that remain at liberty. If the vibration produce but two apparent lines, the string is correct; if it produce more than two, it is false. When found to be incorrect on the first trial, the experiment may then be repeated with another portion of the string. After it has been stretched on the guitar, the last trial is made by sounding it first open and then at the twelfth fret. If, on comparing the two sounds, the octave is too sharp, the string is worthless; if it be merely a little flat, it may be found correct on shifting the string at the end.

4. *Elevation of the Strings.*—The talent of the maker in this particular consists in giving to the strings the appearance of almost touching the frets near the nut, without doing so in reality. If the strings offer a strong resistance to both hands, the guitar is said to have a *hard touch*; if they offer but a slight one, the guitar then has a *soft touch*, in which case the strings will probably strike against the frets, and make a buzzing noise nearly everywhere. Between these two evil extremes lies the proper mean, viz., a touch which produces a *sweet tone*, and with which it is easy to play. The *hard touch* proceeds from the too great tension of the strings, or their too great elevation above the finger-board.



It is observed by Sor that a string is more flexible in the middle, or near the twelfth fret, than at the ends; and in order that the finger which has to press it on the frets near the nut should experience the same resistance, it is necessary that the distance between the string and the finger-board should increase in the direct ratio of the flexibility. It is therefore requisite that the height of the nut should have the same relation with the height of the first fret as the latter has with the second fret; for in proportion as the frets approach the lower end of the finger-board, they should progressively diminish. By this means the same resistance is found everywhere, and consequently the same facility in pressing the strings. As the covered strings, however, in proportion as they increase in depth of sound, are more rarely employed in very quick passages, the line of the bridge on which they bear must not be quite parallel to the plane of the sounding-board, but a little more elevated on the side of the sixth string. This elevation does not occasion any very considerable difference for the left hand; but it is very advantageous for the right hand, allowing it readily to produce stronger and more lengthened bases when required. The bridge, if too low, prevents one touching the strings properly; the bridge too high, removing the string too far from the direction parallel to the sounding-board, the tone will

lose much of its strength, and especially of its roundness.

5. *Proportion of its Parts.*—That “the proportions in all the parts of a guitar contribute essentially to both the *quantity* and *quality* of its tone,” is almost a self-evident proposition; but *what those proportions ought to be*, is a matter not so easily determined. Even guitar-makers are divided in opinion upon this question, as is evidenced by the variety of forms and proportions which may be found in the bodies of European and other guitars; and the assertion that “Acoustical principles have not yet been scientifically and successfully applied,” seems to have some foundation in truth, when we see that *scales and finger-boards of different lengths* are frequently attached to *bodies of the same size*.

In tracing the progressive development of the kind of instruments to which the guitar belongs, we may perceive that the most successful *changes in form* have all had a gradual tendency to the enlargement of the sounding medium—the *body* and *sounding-board*. In the earlier instruments, the circular or oval body had a round back, and was about one-third of the length of the strings (see Plate III., Fig. 1); afterwards the sides of the body were extended so as to form an angle with about one-half of the strings (see Fig. 2); then the body was still further enlarged, and the

back made flat, as in the ancient English guitar (see Fig. 3); and ultimately the curved shoulders were added (see Fig. 4), as in the instruments of the present day.

With respect to the depth of the body, it has for a long time been supposed that the higher the sides were, the more sonorous would be the deep tones at the expense of the high ones; low sides, on the contrary, bringing out the high tones at the expense of the deep ones; and that a proper medium would give equality to all of them.

Mr. Aguado believed that after experimenting frequently in *enlarging* and also in *diminishing* the *body*, both in *width* and *depth*, the form made for him by M. Lacote was the "*juste milieu*"—between the extremes. It had a sounding-board of a peculiar construction, and an extra one in the middle of the body, for the purpose of prolonging and softening the vibrations.

Sor considered that the dimensions of the *body* were very well understood by the makers he mentioned, and therefore paid more attention to the nice adjustment of the *neck*, *frets*, and *bridge*.

From the circumstance that as the *body* and sounding-board of the guitar have gradually been attaining their present *form*, the tone has become more and more powerful, we have reason to conclude that the form now used is nearer to the *beau idéal* of a good form than any of the preced-

ing ones. Whether we shall be able to attain a degree nearer to the *best form for a beautiful tone*, is a question for further discussion.

A proper length of neck is that which brings the twelfth fret at its junction with the body of the instrument. As to its breadth, it is necessary that there should be such a distance between the strings, that the finger may rest on one without touching either of the adjacent ones. The first and sixth strings should, moreover, be at a little more than half the distance between the strings from the edge, in order that they may not slip off, especially in making glides. By observing these rules, the neck will be sufficiently narrow towards the nut, and very convenient in every respect, particularly if it be made only just thick enough to present a proper resistance to the tension of the strings.

The finger-board, or upper surface of the neck, is generally supposed to give facilities in playing, if it be slightly rounded. Of course, the nut, strings, and bridge must have a corresponding adaptation, yet still allowing the silver strings to be a little higher than the others.

The distance between the nut and the bridge, called the *scale* or *diapason*, should never exceed twenty-five inches. This length, at concert pitch, is supposed to give the greatest brilliancy of tone without being hard. To suit some requirements

however, or a player with a very small hand, the diapason may be varied down to twenty-four inches; in which case, the body of the guitar must be reduced in proportion.

A *terz* or *third guitar*, is a small guitar with its scale or diapason reduced to about twenty-two inches, which reduction, with a corresponding adaptation of the body, raises its pitch a minor third above the ordinary guitar.

In the same manner, a *quint* or *fifth*, and an *octave guitar*, have a proportional reduction in their diapasons, and a corresponding adaptation of the size of their bodies.

When it is remembered that even the best seasoned wood is influenced by atmospheric changes, it is almost unnecessary to say, that in order to preserve a guitar in good condition, it should be protected, as much as possible, from all extremes of heat and cold, and especially from damp, by putting it away in the case as soon as we have finished playing.

Having thus enumerated the principal requisites of a good guitar, we presume that an amateur will now be better enabled to choose one, or at least see the necessity for trusting to the judgment of a competent player.

## VII.—TILTON &amp; Co.'s PATENT IMPROVEMENT.

It has for many years been lamented by the friends of the guitar, that there was no method of augmenting the *power* of its tone, and at the same time retaining that beautiful quality of *mellow roundness* which is so much sought for and so generally admired by guitarists; and perhaps one reason why such a desirable result has not been attained, may be attributed to the almost universally received opinion, that the two qualities of tone are inimical to each other in the same instrument—*power* being generally expected from *deep-bodied* guitars, and *sweetness* from *shallow* ones.

But an intelligent investigation of the nature of sound, as derived from the latest acoustical experiments, may be made to prove, that, as *power of tone* depends upon certain conditions of the vibrating body, and *sweetness of tone* upon other and different ones, *they may both exist simultaneously in the same instrument.*

Many suggestions have, from time to time, been thrown out concerning improvements in the mechanism and construction of the guitar. The old method of attaching the strings to the sounding-board has always been considered a weak point by those who gave any thought to increasing the capacity of the instrument for tone. In an article

in the *Westminster Review*, published some years ago, it was asked—"What would be the effect of attaching the strings to a tail-piece, like the violin?" The reason for such a question, no doubt, arose from perceiving that the *quantity of tone* was influenced by the *elasticity of the sounding-board*, and that the old method of putting on the strings was, in some way or other, a hindrance to the full development of the natural power of the instrument.

The difference, however, between the methods of producing the tone on the violin and the guitar (*viz.*, the continuous friction of the bow, and the sudden impulse or twitch of the fingers) renders it necessary that the bridge for the guitar should be something more than a mere support to the strings. In order to communicate the tone to the body, through the sounding-board, the bridge must be permanently fixed to that portion of the instrument.

A sounding-board, like a drum, requires a certain amount of tension to give it elasticity, and this tension ought to be applied to it equally, in order that it may retain its original horizontal form.

In fixing the bridge, therefore, to the sounding-board, the force of the tension of the strings should be so regulated, or provided for, as *neither to draw up the sounding-board nor press it down*



*from its proper straight line*—a condition which, unfortunately, does not attach itself to the ordinary guitar; and, consequently, to a certain extent, the vibrations are neutralized, and the tone of the instrument weakened.

The dilemma in which guitar-makers have hitherto been placed, is thus alluded to by Sor:

“In order that the belly or sounding-board may be set in vibration sufficiently by the impulse communicated by the vibrating string, it should be made thin, and of very light wood. But being as thin as necessary for the prolongation of the sound, the strong and continual tension of the bridge would compel it to give way in a little while, and it would be pressed inwards. To prevent its giving way, the manufacturers have contrived ribs or bars inside. If these ribs are strong enough to support the force of the bridge (equal to the united tension of all the strings, plus the impulse received from the fingers of the right hand), they must necessarily hinder a great part of the vibrations of the sounding-board; and if they are weak enough to enter into vibration themselves, they will not prevent the sounding-board from giving way eventually.”

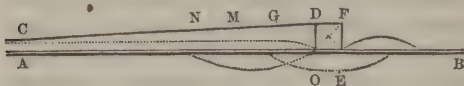
He then demonstrates that the force of the tension of the strings, added to the impulse received from the fingers of the right hand, is not properly counterbalanced by the short arm of the lever at

the ordinary bridge; describes the tendency of the bridge either to tear up the sounding-board, or at least pull it out of the correct line; and suggests a new kind of triangular bridge, with a bracket underneath attached to the inside end of the body and sounding-board, as a means of overcoming the difficulty; but such an arrangement would only encumber the instrument, and neutralize a most valuable part of the guitar.\*

The only way to avoid this dilemma, is—to adopt some other method of bracing the sounding-board equally; to attach the strings to the bridge without allowing it to strain the sounding-board out

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\* The following is the demonstration, extracted from Sor's Method, of the insufficiency of the old manner of attaching the strings to the guitar:



"If on a sounding-board, the profile of which is represented by the line A B, the bridge D O E F be fixed, the tension of the string C D will cause the point D to have a strong and continual tendency towards the point G, and this point towards the point M, which in its turn will have the same towards N, and so on; for the constant action of the head containing the pegs is to draw towards it whatever forms an obstacle to hold the other end of the strings from approaching it. To resist this great combination of tensions, there is only the short arm of the lever D E, because, as long as the bridge holds its place, D may be considered as a fulcrum. It is very easy to see that the power

of form; and to place in a different part of the guitar the force necessary to resist the combined tension of the strings.

The merit of fulfilling these and many other necessary conditions, and at the same time of surmounting what has always been a difficulty in the construction of the guitar, must unquestionably be awarded to MR. WILLIAM B. TILTON, a native of New Hampshire, of late years a resident of Alabama, and now permanently located at No. 18 Beekman-street, New York.

According to the *West Alabamian*, published at

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and the resistance are in the arms of their respective levers, and that the point D is drawn much more towards C than towards E. He who would dissent from this conclusion would think it disproved by observing to me that the adhesion of the bridge to the sounding-board, by means of glue, and sometimes even by screws, is much more powerful than the tension of the strings; but this objection would complete my demonstration. I have never observed that the solidity with which the bridge is fixed to the sounding-board so far exceeded the force of tension of the strings as to cause them all to break; but I have often seen the strings pull off the bridge. Supposing, however, that such a thing might never happen, and that the two powers were in the inverse ratio of the arms of their levers, it is not the less true that in the obtuse angle C D E, the point D, which is impelled by two very powerful agents towards the point O, will bear upon it with the sum of the forces C D + D E, and that these two lines tending to become one line only, C E, with a force and tenacity which the sounding-board would not long resist, it must give way at the point O. As soon as the point E becomes raised, it either separates, or else, tending to raise up the part E B, eventually cracks the sounding-board."

Carrolton, Ala., Mr. Tilton, "in experimenting upon an old violin, was struck with the idea of improving the sound, both in tone and volume, by removing the cause which, in his opinion, impeded the vibration. He made the attempt, and succeeded. Determining to test his Improvement by the severest scrutiny, he took several of his improved violins to New Orleans, placed them under the inspection of the most eminent musicians in that city, explained the nature of his Improvement, and received the highest assurance of the value of his invention."

The requisite measures were then taken to *secure* the Improvement, and afterwards letters patent were granted.

"The gist of this invention," says the *Scientific American*, "is, that it will improve all violins in the volume and quality of tone, by removing obstructions to the full and free vibrations of the instruments of the ordinary construction. The improved violin also grows better and better, according to the laws which have been found to govern this instrument. The fair conclusion, then, is, that had either of the Amati made and applied the same discovery, their violins would now be much better than they are."

As the invention is equally applicable to the guitar, Mr. Tilton naturally turned his attention to that instrument also; and, after various experi-

ments, so completely successful was the result, that he received the *prize medal* at the fair of the American Institute, in 1853, for "*the best toned guitars.*"

He also received, the same year, the "highest medal" for his improved violins—making the second prize-medal for violins.

The Tilton guitars would also have received the medal from the jury on musical instruments at the Crystal Palace Exhibition, had it not been for an informality with respect to the time of sending them in. The jury, however, thought it right to state, in a certificate signed by every one of its members, "that had the guitars of Wm. B. Tilton & Co. been placed in the Exhibition at such an early period as to have complied with the rules established for our guidance in rendering awards, we should without hesitation have granted them the medal placed in our hands."

Messrs. Tilton & Co. also received the highest prize—a gold medal—from the County Fair, at Albany, September 28, 1854, "for the power, volume, and sweetness of tone, and also the exquisite finish of the Patent Improved Guitars," exhibited by Messrs. Boardman & Gray; and also "the most hearty approval of the Invention, founded as it is on mechanical principles, by which clearness and more power are added to the natural tone of the guitar."

In the course of his experiments, Mr. Tilton has made several alterations in the construction of the guitar,—all tending to strengthen the instrument, increase the volume of tone, and also to add to its external beauty.

The interior arrangements have a two-fold method of operating in improving the instrument; for the very contrivance used for strengthening the body, releasing the sounding-board from cumbersome appendages, and forming the counter-balancing force against the united tension of the strings, is, in itself, *an important addition to the vibrating medium*. It is, in the opinion of several scientific gentlemen, “a happy and successful instance of the peculiar labor-saving nature of American mechanical ingenuity.”

Among the principal advantages connected with the Tilton Improvement, we would call attention to the following:

1. It *increases* the *volume* of the *tone*, giving a rich fullness to the bass, and a brilliancy to the treble portion of the scale.

2. The *harmonic sounds* are both louder and clearer.

3. The delicate shades of tone used in the *glide* and *vibration* are produced with more distinctness and less manual effort.

4. From the peculiar nature of its construction, the instrument is essentially strengthened, and the

quality of tone rendered more equal. It is also less liable to change from atmospheric causes.

5. The method of attaching the strings to the bridge, while it overcomes the difficulty alluded to by Sor, is likewise another means of adding to the volume of tone.\*

6. There are also other additions to the sounding medium.

7. The bridge can never tear up the sounding-board.

8. The sounding-board being freed from cumbersome appendages, the skillful maker has more control over the instrument in adapting the quality of tone to the requirements of different tastes.

The Improvement can be applied to *any* instrument that may be thought worthy the experiment.

It frequently happens that a guitar is presented as a *souvenir* of friendship, and consequently the instrument is chosen with every attention to exterior elegance and richness of material; but in nine cases out of ten, unless it has been selected

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\* The old method of fastening the strings to the end of the body, and then passing them *over* the bridge (see experiment No. 7, page 3, and Fig. 3 in the plates), seems, at first, to resemble the plan of the Improvement: but, upon closer inspection, it is found to be deficient in the bone and sinew of the modern arrangement: viz., the sustaining bar in the centre of the body, and the peculiar contrivance which acts upon the strings at the bridge.



by a player, the tone, in consequence of the extra weight and peculiar nature of so much *sound-killing ornament*, is really inferior to that of a common guitar. To such an instrument the Improvement will be a most valuable addition, for its application will furnish just the one thing that was needful—a *fine tone commensurate with the beauty of the external appearance*.

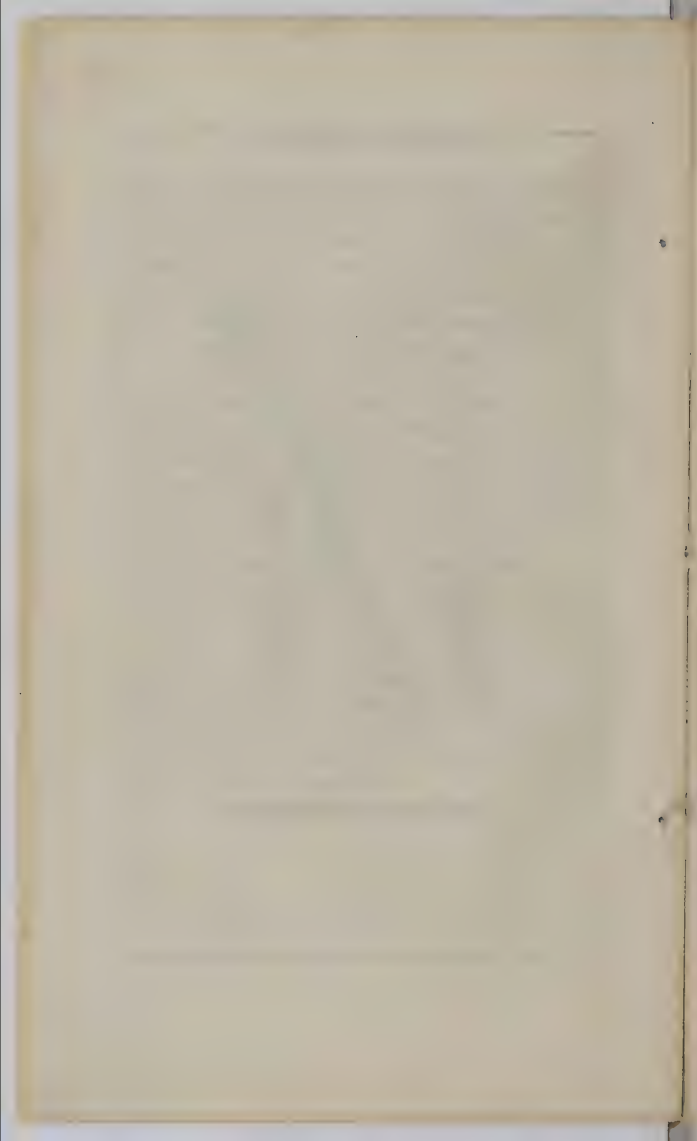
In the case of *any plain guitar*, with a good finger-board, which may be deficient in volume, or have an inward quality of tone, the addition of the Improvement will be *sure* to remedy the deficiency, and probably enhance the value of the instrument to *thrice its original cost*.

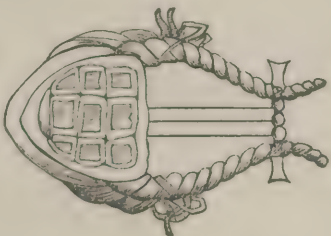
The Improvement can also be applied with success to the *best instruments* of the *most celebrated makers*.

From the peculiar facilities which the Improvement offers, the Proprietors are enabled to furnish different classes of guitars, at reasonable prices, with tones *superior* to those of the most expensive and highly ornamented instruments of other manufacturers and importers

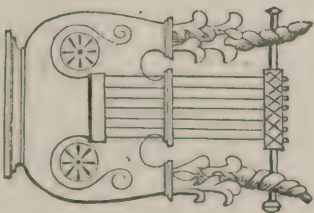


From Denon's Egyptian Remains.

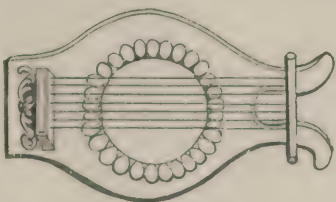




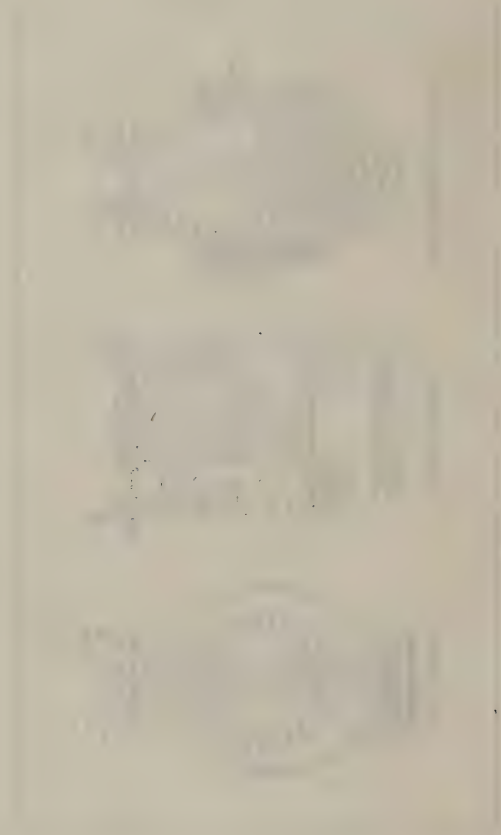
Ancient Tortoise Lyre.



Grecian Lyre.



Roman Lyre.



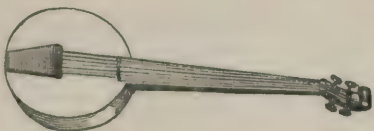


Fig. 1.

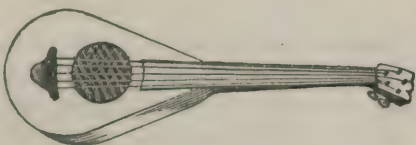


Fig. 2.

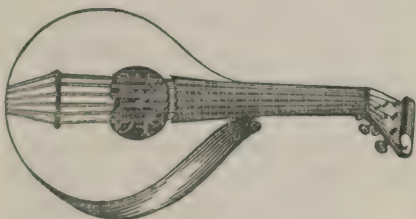


Fig. 8.



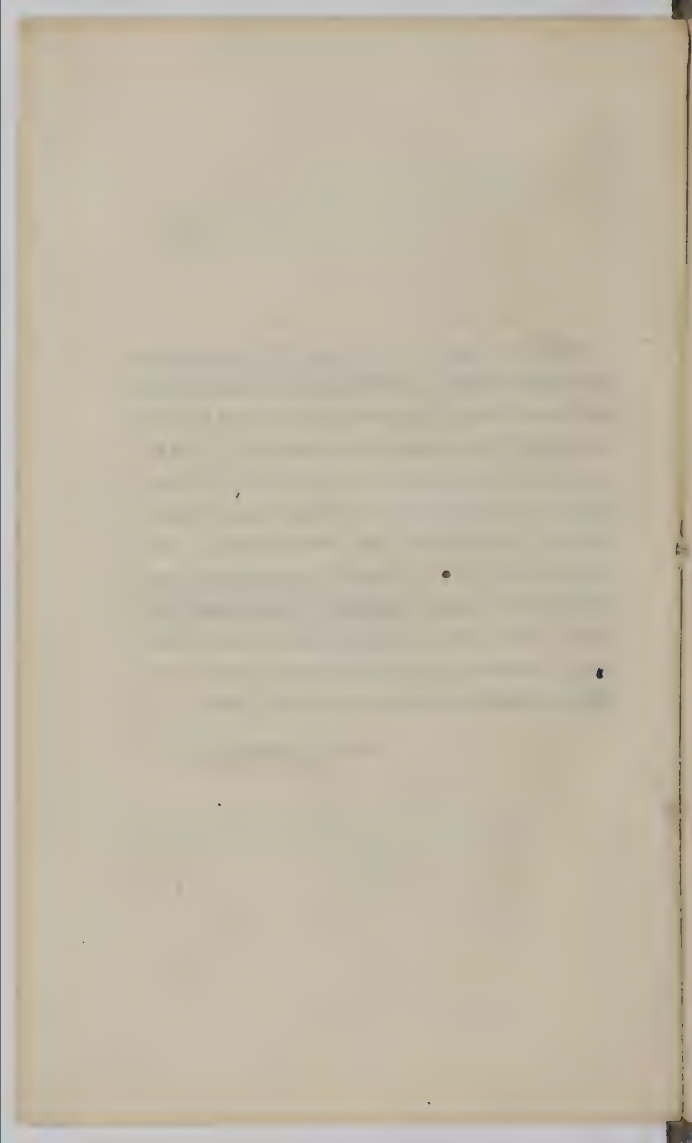
Fig. 4.





BELIEVING that the previous little treatise on the Guitar might be interesting to amateurs, we have made arrangements with Mr. Ballard to have it appended to our descriptive pamphlet. The information contained in it will, we believe, be useful to many guitarists in enabling them to detect spurious instruments; and from having a clear perception of the requisites of a good guitar, they will be in a better position to appreciate the merits of our Patent Improvement, which is now being introduced, with the greatest success, by different agents, in every part of the Union.

WM. B. TILTON & Co.



AS IT IS ASSERTED

THAT

TILTON'S  
Guitars and Violins

ARE SUPERIOR

IN TONE

TO PRICES UNCOMMON AT ANY AGE,

THE PROOFS

MUST SUSTAIN THE BOLD ASSERTION.

FOR SUCH, WE CONFIDENTLY REFER TO THE PAGES OF THIS  
LITTLE BOOK.

W. B. TILTON & CO.

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OF

TILTON'S  
PATENT IMPROVEMENT  
FOR THE  
Guitar and Violin.

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THE success which has attended the introduction of Wm. B. Tilton and Co.'s Patent Improvement for Guitars, Violins, &c., to the Musical World, and the satisfaction expressed by the numerous Professors and Amateurs who have already tested its merits, have so far exceeded the most sanguine hopes of the proprietors of this important invention, that they have deemed it necessary to issue the following pages, in order to conveniently answer the many inquiries respecting the nature and merits of the "Improvement."

The invention has been secured by Letters Patent in the United States, and in Europe; and the proprietors are effecting arrangements with the most influential Musical Firms in different parts of the Union for the agency in their respective districts. The principal features of the Improvement, whether applied to the Guitar or Violin, may be enumerated as follows:

I. It gives to a *new* instrument a brilliancy, sweetness, and general quality of tone, which has hitherto only

been obtained from the oldest Instruments of the most celebrated makers.

II. The Instrument is essentially strengthened; its vibrations have more freedom, and the tone is consequently more powerful.

III. It can be played upon with greater ease.

IV. If applied to an old and superior Instrument, it not only increases the tone with respect to power and brilliancy, but it also enhances whatever quality of tone may form its distinguishing characteristic.

The method of effecting this important object is, by the addition of certain internal arrangements, which strengthen the body where strength is most required, allowing other important parts of the Instrument to be released from hindrance to the full amount of vibration properly belonging to the sounding medium.

In applying the improvement to instruments of the Violin class, no change is made in their external appearance; but in attaching it to the Guitar, it is necessary to make several alterations from the old method of construction, both internally and without. The method of playing the instrument, however, remains unchanged, while its external appearance is decidedly improved, the alteration being of a Lyric character.

The following notices from the Press give a condensed account of the origin and growth of the invention.

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(From "*Glances at the Metropolis*," by Isaac D. Guyer, Esq.)

The Guitar can be traced far into antiquity. The word itself is derived from the Greek, *Κιθάρα*, and comes to us immediately through the French, *Guitarre*; although, with slight deviations, it is the same in other modern languages. The English and French Guitar of

the last century was wide and thin in body, short in the neck, and strung with wire. The modern Guitar, which generally preserves the Spanish form, and differs little from the lute, is in very general use now throughout all nations. It is one of the most touching and inspiring instruments ; and around it is woven a net-work of tender associations, which belong to the history of love and passion, in moonlit hours, from grove and river's bank, and castellated balcony ; from the cold North, in its genial summer season, and the purple South, where the Arctic winter never comes, and the light of the Tropics blushes eternally.

But beautiful and popular as it has been for ages, it was never brought to perfection till three years ago, and then by a man who was born among the granite hills of New Hampshire, and who, in his boyhood, beat his own snow-path to the district school of New England ; but these porticoes of the people have been the nursing-spots of genius, where the controlling minds of this continent nestled in their youth among the cold hills, genial with the light of love, and radiant with the soul of intelligence.

William B. Tilton spent many years at the South, and, under its sunny skies, with a deep enthusiasm for music, and after many experiments, he struck upon an improvement which is the greatest ever made in the Guitar and the Violin. An impression had prevailed that neither of these instruments could become perfect, except by being used a number of years. Hence, we have heard and read so much about the old violins of Cremona, made two centuries ago. They have acquired such reputation, that they have been sold for enormous prices. "Paganini" paid one hundred and fifty thousand francs for one of them ; and from ten to one hun-



dred and twenty-five thousand francs each for several others ; in his will he left them to friends he loved ; and yet *Tilton* can take any perfectly made Violin, and in a few hours, by adding to it his improvement, fully rival, if not excel, in richness, depth, distinctness, and sweetness of tone, any instrument of the kind ever seen in this country, or that has been on trial with it in Europe. The same improvement can be added to the Guitar, and the result the same.

From the beginning, Guitars, Violins, Lutes, and all similar instruments, have been so constructed, that the sound-board has depended for its chief support upon pine blocks or supports, glued at the ends, around the edges, or across the instrument. Now, as the sound which is produced by a stringed instrument must depend upon the vibration, this vibration is materially disturbed by solid and unyielding blocks, bars, and sticks, which confine any portion of the sounding-board, or of the body of the instrument. Hence, it is only when, by the lapse of time, these blocks and cumbrous pieces of deal wood become gradually lighter, and partly detached, that this deadening and harshening effect is somewhat obviated. But *Tilton's* improvement dispenses with difficulties in the beginning. The two extremities of the body of the instrument are so connected as to increase its strength beyond the old system, and the sound-board is left perfectly free and elastic in all its vibrations. Moreover, the strings, which in all other Guitars have hitherto terminated at the bridge, or, if carried to the end of the instrument, been fastened there in a manner to impair the vibration, are, by *Tilton's* Patent, conducted further, till they have a connection with the entire instrument itself, so that a single note, instead of appearing to come from the string,

with a vibration of the sound-board, is more like a gush of melody poured forth from the whole instrument. Some most important results are thus achieved. The new instrument, if it be perfectly made—one of Tilton's for instance, or one of Martin's, with Tilton's improvement added to it—gives forth sounds, deeper, richer, and prolonged into more voluptuous strains, the first time it is struck, than the old instruments of former ages, which have been toned and softened by time.

There is a unanimous concurrence of opinion among European and American artists on this point, as well as in the fact that the same execution, which in an ordinary Violin or Guitar excites no admiration, since it is only correct, produces over one of Tilton's instruments a magical effect, causing the educated ear, in listening, to give first more intense attention,—when it awakens surprise,—and raises at last an enthusiasm of delight. A visit to Tilton's establishment, where complete instruments, with and without his improvement are tried, can alone give the illustration which we attempt to convey in words.\* The difference is so great, that those who have cherished instruments, which have either been given to them by friends they loved, or which are interwoven with many tender souvenirs, are disposed at once to lay them aside—preserving them, it is true, because of their associations, but as utterly unworthy of their skill for the future. But the nature of this improvement of Tilton's is such, that it can, like the *Æolian Attachment* in Pianos, be added to any instrument: and thus there need be no sacrifice of feeling or taste, and the old instrument, which was beloved perhaps for the giver's sake, may still be cherished, growing dearer still, because new life, light, and melody have broken forth where no new life, light, or melody were ever expected to come.

The effect of an orchestra of instruments with Tilton's improvement, differs from the effect of any other orchestra—just as a well-executed serenade in “the stilly night,” coming in dulcet strains to the rapture-smitten ear, differs from the same performance in mid-day, from the excitement and roar of a city. The effect of that improvement upon the music of those instruments may, perhaps, more felicitously be compared to the effect which is produced by the improved, chastened, and refined results of vibration across the waters. This improvement has not yet become generally known in the country; but, from the most gifted performer, to the pupil taking the first lesson, there is and there can be no difference of opinion; and the most gifted and experienced cultivators of music—*all*—agree that TILTON has imparted to the musical world a gift which will place all nations under obligations, and win for him universal gratitude.

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## “TILTON'S PATENT GUITARS”

AND THE

### CRYSTAL PALACE REPORT.

THE question having been frequently put to us, since the publication of the Report of the awards of the Jury on Musical Instruments at the Crystal Palace, why, if our claims to the reputation of manufacturing the *best Guitars in the country*, and our claim to having *invented a valuable improvement* in this instrument, be well founded, the *Medal* should have been awarded to another maker of these instruments, and ourselves receive only

the distinction of an honorable mention? We would state, that circumstances prevented us from depositing specimens of our Instruments in the Exhibition until it was too late for them to be examined in competition with others which had been there from the first.

We have the satisfaction, however, of being able to place before the public the following certificate signed by *all* the members of the Jury on Musical Instruments, which is sufficient to show that, in their opinion, our claims are well founded,—an opinion which, as private Judges, they hesitate not to avow; though in their capacity as Jurors, to our misfortune, they had not the authority to speak.

WM. B. TILTON & Co.

"WE, the undersigned, members of the Jury on Musical Instruments exhibited at the Crystal Palace, think it right to state, that had the Guitars of Wm. B. Tilton & Co. been placed in the exhibition at such an early period as to have complied with the rules established for our guidance in rendering awards, we should without hesitation have granted them the Medal placed in our hands.

"GEO. F. BRISTOW,  
RD. STORRS WILLIS,  
WILLIAM NORRIS,  
EMILIUS GIRAC,  
THEO. EISFELD,  
LEO MEIGNEN,  
ALFRED BOUCHER,  
JULLIEN,  
WM. HENRY FRY,  
MAX MARETZKE."

*(From the N. Y. Sunday Times.)*

**TILTON'S IMPROVEMENTS IN THE VIOLIN AND GUITAR.**—Musicians have long believed, that to possess perfection of tone, a Violin must be aged—that, however well seasoned the materials, however well put together, antiquity, as well as constant use of the instrument, was requisite to perfect it. Unquestionably, age and use do improve good Violins; but, though two centuries have elapsed since the Italian makers produced the first-rate instruments of which so many clever imitations are constantly got up, it is only of late years, and in this country, that an improvement has been attempted and made in their construction. After many years of constant labor and countless experiments, Mr. William B. Tilton has succeeded, by a combination of scientific principles and common sense, in effecting certain improvements applicable alike to Violin and Guitar, by which the value of an old instrument can be vastly enhanced, and a new one will obtain the good points which distinguish first-rate old instruments. Among these points, the chief is to obtain a tone at once clear and full, mellow and round, sweet and powerful. Mr. Tilton obtains this by removing all the dead wood hindering the vibration, which should be fully and equally diffused. In his hands an old Violin (whether made by the Amati of Cremona, by Straduaris, by Guarnerius, or by later artificers) is immensely improved. To obtain strength, which is required to resist the immense strain from the strings on the top of the instrument, they underlaid it with wooden bulk which dulled the sound by stopping the vibration. Mr. Tilton's improvement strengthens the instrument, be it Violin or Guitar, where it is weakest, and sustains it from the utmost strain

that it can be subjected to from the greatest tension of the strings. Further, it wholly disconnects the sound-board from the end-blocks, and enables it to perform its only duty, namely, to convey by vibration the sounds which it receives. The result is not only that the instrument is strengthened in the most simple yet scientific manner, but the vibrations are wholly uninterrupted, so that the sound drawn from each string is prolonged and continued; the equality of the harmonic sounds is increased in power; and the general tone is perfected into a *certainly* of sweetness, power, clearness, and fulness. The great practical merit of Mr. Tilton's discovery consists in the fact that, if an ordinary tenth-rate Violin or Guitar be subjected to it, an alteration is immediately effected by which it can "discourse most excellent music." Two years ago, at the fair of the American Institute, one of the ordinary cheap Violins (made "to sell," like Peter Pindar's razors), was examined by competent judges, after having been improved by Mr. Tilton, and was awarded the silver medal for its undoubted superiority, clearness of tone, and volume of sound. The low price at which the improvement may be effected renders it in everybody's power to attain it. The difference between a good Violin and a bad one is worth much more than ten dollars. The leading Musicians and Amateurs of New York, who subjected the improved Violins to a severe public trial, have certified in favor of Mr. Tilton's invention, and, in London, Messrs. Withers (musical instrument makers to Queen Victoria) who applied it to a Joseph Guarnerius Violin (valued at \$1,000), to an ordinary Violin, and to a tenor, say: "The result was in each case satisfactory beyond our most sanguine expectations; it gives freedom, power, and brilliancy to the tone, without interfering in any way with the external

appearance of the instrument; and we have no hesitation in saying that it must be universally adopted." From Paris, too, where the Tilton improvement has been closely tested, the report is equally favorable. The change which Mr. Tilton effects in that fashionable and favorite instrument, the Guitar, is worth notice. Not only does he produce a longer vibration, but increases the volume of sound, producing tones resembling those from a fine Harp. His improvement, too, much increases the external beauty of the instrument. Mr. Tilton's manufactory and place of business is in Beekman-street, No. 18, a few doors from Nassau-street. Whoever wishes to see the triumph of American skill will take a Violin or Guitar to him, at that locality, and, at a small expense, have the instrument improved beyond all expectation.

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*(From the Sunday Courier.)*

THE FAIR AT CASTLE GARDEN.—"TILTON'S PATENT GUITAR," now on exhibition at the Fair, attracts the attention of every one, and justly receives from the admirers of this truly favorite instrument the highest encomiums. The improvement gives a sweetness and brilliancy of tone never before obtained for the Gaitar; at the same time that it removes all impediments to "free vibrations" (a quality so much needed in all unimproved instruments), it strengthens and renders it less liable to injury from change of atmosphere. In fact, this is the first improvement that has met the unqualified approval of many of the most eminent professors, both in this country and Europe.



*(From the U. S. Journal.)*

IMPROVEMENT IN THE GUITAR.—Messrs. Wm. B. Tilton & Co. the Patentees of this excellent invention, have just received the highest prize—a Medal—for their Guitars, although in competition with one of the most celebrated manufacturers (Schmit & Maull). This improvement increases the power of the instrument until it becomes harp-like in its tone, rendering it more continuous in its vibrations, and giving it a sweetness of tone that we are certain can only be produced by the introduction of this long needed invention. We hope the Inventor may reap from his valuable discovery the success he so richly deserves; and if it is possible to judge, from the innumerable certificates he is daily receiving from the most eminent Professors, both at home and abroad, we are quite certain he will.

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*(From the Empire City.)*

VIOLINS.—The common idea that the Violin cannot come to its full tone but by age and use may be correct, as it has been shown that by constant use and long seasoning the best-made Violins have improved. This unfortunately led to the supposition that the Violin was incapable of improvement in any other way, hence, while all other instruments were improved so as to keep pace with the advance in music, no effort was made in this most musical of all instruments. A short time since, W. B. Tilton, of Carrollton, Ala., while experimenting on an old Violin, produced such a decided improvement as to warrant him in the idea of being capable of working with like effect on any similar instrument. His mode of operation is based on scientific principles, as, by re-

moving the obstructions to the vibrations it is evident a deeper, rounder, and clearer tone is produced, and the better the instrument, new or old, the greater the improvement. Having examined some of the instruments in Mr. Tilton's Factory, we took a Violin to him that was considered an inferior instrument, and the result of his alterations on it has so improved it as to add eight hundred per cent to its value, and so altered its tone as to make it equal to the best old Violin. An equal improvement is made on Guitars.

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*(From the America's Own.)*

GUITARS AND VIOLINS.—The American people love good music, and often tolerate bad music. The ladies are partial to the Guitar, and gentlemen to Violins. They are both charmed with the melodious notes that issue from Ole Bull's instrument, and the gentlemen wish that such instruments could be procured here at a reasonable sum. The patience of the ladies is often exhausted while endeavoring to tune a Guitar to produce melodious notes, equal to those they have heard from some rare and costly instrument, and they almost envy the owner the possession of such a musical jewel. American genius has supplied the wants of both ladies and gentlemen in this respect. William B. Tilton has discovered the means to render the cheapest kind of Guitars and Violins equal in tone to the best instruments manufactured in Europe. The invention is founded on strictly philosophical principles, and is designed to enable professors and amateurs of the Guitar and Violin to obtain most excellent instruments at moderate prices. The invention has been thoroughly tested by musical men, and has universally been commended. As an instance of

the great excellence of the invention, we would mention, that Mr. Tilton added the improvement to one of the cheapest sort of violins, and placed it in the Fair of the American Institute. The Instrument was minutely examined and tested by competent judges, and he was awarded the silver medal for its undoubted superiority, clearness of tone, and volume of sound.

Mr. Tilton has frequently received some of the celebrated MARTIN'S best Guitars to *improve*. His invention could not receive a greater compliment. We may enumerate the following as the benefits of this invention: I.—It gives to a new Instrument a brilliancy, sweetness, and general quality of tone, hitherto only acquired by age. II.—The Instrument is essentially strengthened—its vibrations freer, and its tones are eminently louder. III.—It can be played on with greater ease.

The cost of the improvement is trifling, when compared with the value it gives to the Instrument improved.

Industrie-Ausstellung in Castle-Garden.

### Bewunderungswürdige Erfindung zur Vervollkommenung der Guitarren.

Von allen Guitarren, welche in der oben genannten Industrie-Ausstellung und überhaupt jemals der Prüfung Sachverständiger dargeboten worden sind, ist unseres Wissens keine einzige im Stande, den Liebhabern dieses allgemein beliebten Instruments dieselbe Befriedigung zu gewähren, wie die schöne „Patent-Gitarre“ der Herren WM. B. TILTON & Co. Alle, welche dies schöne Instrument versucht haben, erklären, daß es ihren Anforderungen vollkommen genügt. — Es ist nämlich an dem Instrument eine Verbesserung angebracht, welche nicht

allein seine Kraft so weit verstärkt, daß es einen *harfen-ähnlichen* Ton erhält, sondern die auch den Ton selbst brillant und harmonisch zugleich macht. Die Vibrationen bleiben gleichmäßig (wodurch sie sich von denen bei allen andern Guitarren unterscheiden), und werden weniger unterbrochen, so daß der Spieler dadurch in den Stand gesetzt wird, selbst die schwierigsten Passagen mit der größten Präcision auszuführen und dabei den Tönen eine Weichheit und Lieblichkeit zu verleihen, welche durch Nichts übertroffen werden kann. Diese Verbesserung leistet in dieser Richtung, was keine andere bisher vermocht hat — sie vergrößert die Kraft und Stärke des Tones zugleich mit der Schönheit desselben — und wir dürfen sie darum mit Recht in dieser Beziehung zu den bedeutendsten Erfindungen unserer Zeit rechnen.

*(Translation.)*

#### FAIR AT CASTLE GARDEN.

WONDERFUL IMPROVEMENT IN THE GUITAR.—We know of no Guitar ever having been exhibited that presents to the lovers of this favorite Instrument the same amount of satisfaction that is felt by all who examine the beautiful "Patent Guitar" of Messrs. Wm. B. Tilton & Co. This improvement not only increases its power, until it is rendered "harp-like" in tone, but it adds a quality of tone at once brilliant and harmonious; the vibrations being unchecked (differing in this respect from those constructed by all other makers), are more continuous, enabling the performer to execute the most difficult passages with the greatest precision, producing a sweetness of tone that we are confident can only be obtained by this. the greatest improvement of the age. Another great advantage is, it adds to the strength at the same time that it increases its beauty.

**Ein preiswürdiges Patent auf Guitarren.**

Mr. Tilton u. Co. haben in der musikalischen Welt eine der vorzüglichsten Verbesserungen eingeführt, die jemals an der Guitarre angebracht wurden. Durch diese (wohlfeile) Veränderung haben sie die Stärke des Tons bis zu dem der Harfe erhöht. — Der Ton wird zugleich sanft und brilliant, und das Instrument ist zugleich leichter zu spielen, da seine Klänge harmonischer und ausklingender sind. In der That, zum erstenmale wird der Welt eine vollkommene Guitarre geboten — und es ist anerkannt worden von Allen, welche Musik beurtheilen können, daß diese Guitarren unter die ausgezeichnetsten Erzeugnisse unseres Zeitalters gehören. — Die Herren Tilton u. Co. haben also die Ehre, in diesem Lande eine der ersten Verbesserungen in musikalischen Instrumenten erfunden zu haben, und wir hoffen, daß sie so viel Glück damit machen, als diese Verbesserungen der Welt werth sind.

*Aus der New-Yorker Zeitung. Sonntagsblatt der Reform für Kritik, Kunst und Belletristik. New-York, 8. Januar 1854.*

*(Translation.)*

**A VALUABLE PATENT ON GUITARS.**—MESSRS. Wm. B. Tilton & Co. have just introduced to the Musical World one of the most valuable improvements ever made upon this favorite Instrument. With the addition of it (which incurs but a slight expense), they increase its power until it becomes harp-like in its tones, giving it at the same time a brilliancy combined with a sweetness of tone never before obtained upon this universally favorite Instrument—rendering it far more easy to be played upon, its vibrations being more continuous and harmonious; in fact, for the first time presenting to the world a “perfect Guitar.” It is acknowledged by all to be the musical wonder of the age,—philosophical in its

principle, and reflecting credit upon its inventor, who has done an honor to his country, and, we hope, made a fortune for himself. The Scientific and Musical World will be well repaid by a visit to their warerooms.

Jan'y 8th, 1854.

### **Tilton's Patent Guitarre.**

Seit der Erfindung der Guitarre hat man sich vielfach bemüht, dies vorzügliche Instrument durch verschiedenartige Verbesserungen zu vervollkommen. Keine dieser Verbesserungen erreicht ihren Zweck in dem Grade und ist darum von solchem Werth wie diejenige, welche gegenwärtig von den Herren Wm. B. Tilton u. Co. an ihren ausgezeichneten „Patent-Guitarren“ angebracht ist. Sie verleiht dem Ton dieser Instrumente eine unübertreffliche Qualität, indem sie ihn voll und klangreich gleich dem der Harfe macht, womit sich eine bisher unerreichte Weichheit und Lieblichkeit zugleich verbindet.

New-Yorker Criminal-Zeitung u. Westriffsches Journal, 13. Januar 1854.

### *(Translation.)*

**TILTON'S PATENT GUITAR.**—For the first time since the earliest record we have of the Guitar, has this noble Instrument received such valuable improvements as Messrs. Wm. B. Tilton & Co. have just introduced to the lovers of music. By their patented improvements they impart a quality of tone never before obtained for it, also increasing its power until rivalling the harp in fulness as well as sweetness of tone.

## PHILADELPHIA TESTIMONIALS.

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The following extract from *Cummings' Evening Bulletin*, of January 10th, gives some details concerning the introduction of Tilton's Improvement to the notice of the Professors and Amateurs of Philadelphia:

INTERESTING TO THE ADMIRERS OF THE GUITAR.—On Friday evening last a number of the most eminent Professors of the Guitar in this city met for the purpose of thoroughly examining one of the celebrated "Martin's" Instruments, to which Messrs. Wm. B. Tilton and Co. had just applied their patented improvement. (This Guitar was one that had been made to order in the most careful manner for Franklin Peale, Esq., of the United States mint, an estimable citizen of this place.) Upon a close investigation, they were unanimous in their opinion that the improvement is a valuable one, giving a full, clear, and melodious tone, only to be equalled by the rich tones of the harp. This is certainly a great desideratum, when we consider the universal objection heretofore made by all lovers of this favorite Instrument, viz., a lack of vibrating power sufficient to produce volume of tone combined with sweetness.

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(From the *Evening Argus* of Jan. 12.)

WONDERFUL IMPROVEMENT IN THE GUITAR.—We learn that Messrs. Wm. B. Tilton & Co., of New York, have just introduced to the Musical World one of the greatest improvements ever made upon that Instrument. At a meeting held on Friday of last week, composed of



some of our most eminent Professors of the Guitar, for the purpose of thoroughly testing the merits of the above patented improvement, it was decided by all present, after a very careful investigation, that it not only gave increase of tone, but added to the sweetness also, giving a volume of tone that will compare with the Harp both for power and melody. This will create a new era in this long neglected though universally favorite Instrument. We wish the inventors the success they so richly merit.

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(From FRANKLIN PEALE, Esq., a distinguished Amateur of the Guitar, to our Agent.)

DEAR SIR—The Guitar which you have altered, in accordance with Mr. Tilton's plan, is a favorite Instrument made for me by Martin. I have pleasure in stating that I find it improved in *quality* of tone and *freedom* of vibration. It was originally remarkable for its power, especially in the lower notes; and I believe that it is now better than ever throughout the whole scale.

I have not the least doubt, and my opinion is founded on long experience, that the strength and durability of the Instrument have been increased upon sound mechanical principles; the interior longitudinal brace being placed so as to support the tension of the strings in the direct line of its action, relieves the sound-board from the incessant strain to which it has been subjected by the old construction, whilst their attachment to the bridge allows the fullest resonant effect to be communicated from their vibration.

A variety of minute particulars of improvement could be enumerated, but it is, perhaps, sufficient to say, that the Guitar has, by these modifications, been very

much improved in quality of tone, power, and resonance, and its durability greatly increased.

Very respectfully,

Your obedient servant,

FRANKLIN PEALE.

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PHILADELPHIA, Jan. 16th, 1854.

GENTLEMEN—The Guitar which you have altered for me is entirely satisfactory, as my letter to your Agent will prove. I now send by Adams & Co.'s Express my "Tierce Guitar," which I beg you to alter in the like manner, but which (being used in conjunction with the large one) I cannot spare without inconvenience; *you will oblige me much by returning it as soon as possible.*

I have no direction to give in relation to this Instrument, having observed how careful you were in retaining the bridge of my large Guitar, with its peculiarity of construction, height of the strings, &c., &c.; but will merely observe that it is possible that it has been drawn up by the strings a little, so as to falsify the higher notes of the scale: but of this you will be able to judge when you receive it.

I anticipate results as satisfactory in the alteration of this Instrument as in the other.

I am respectfully yours, &c.,

FRANKLIN PEALE.

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(From Messrs. Wm. Schubert and Francis Wieland.)

WM. B. TILTON & Co.

GENTLEMEN—It is with pleasure I attest to the great improvement you have made in a Guitar of "Martin's" make, owned by Franklin Peale, Esq., of this city. It was a superior one, having been made to order; but tho

addition of your "Patented Improvement" has rendered it Harp-like in its tone, giving increased vibration and sweetness. I congratulate you upon the complete success of this, the greatest improvement ever made upon the Guitar.

WM. SCHUBERT,  
Professor and Teacher of the Guitar,  
North 7th, 1st door above Vine.

*(From Francis Wieland, eminent as a Composer for the Guitar.)*

Having been present at the examination of your "Patented Guitar," I fully concur in the opinion as expressed above, by Mr. Schubert.

FRANCIS WIELAND,  
Professor and Teacher of the Guitar,  
● Cherry-street, below 10th, south side.

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*(From J. Weber, Esq.)*

GENTLEMEN—Having been present at a meeting composed of some of our most eminent Professors of the Guitar, for the purpose of testing the qualities of your valuable Patent, I take great pleasure in testifying to the very beautiful effect produced by the Improvement; it has changed the character of the Instrument, causing it to give a quality of tone never before obtained from the Guitar. Its vibrations are rendered far more continuous, together with a sweetness in the quality of tone only obtained by your valuable invention. The Guitar you improved for Franklin Peale, Esq., of this city, made by *Martin*, gave perfect satisfaction to every Professor present.

J. WEBER,  
Cor. 10th & Lombard streets.

(*From Peter F. Stout, Esq.*)

PHILADELPHIA, January, 1854.

GENTLEMEN—I take great pleasure in thus acknowledging the high opinion I entertain of your great Improvement for the Guitar. I was present recently at a meeting of a number of our most distinguished Professors of the Guitar, for the purpose of thoroughly examining one of *Martin's* celebrated instruments (the property of Franklin Peale, Esq., of this city), to which you had applied your Patent. Upon a close investigation, which I assure you was thorough, they were *unanimous* in their opinion, viz., that the Improvement is a wonderful one, giving a clear, full, melodious quality of tone, fully rivalling the Harp in *breadth* and *distinctness*. This is certainly a great desideratum, when we consider the universal objection heretofore made by all who use this Instrument, viz., a lack of *vibrating* power sufficient to produce *volume* of tone combined with sweetness.

Yours with respect,

PETER F. STOUT,

17 Sansom-street.

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(*From T. Seron, Esq.*)

PHILADELPHIA, Jan. 13th, 1854.

MESSRS. WM. B. TILTON & Co.

GENTLEMEN—I had the pleasure to-day, for the first time, of examining one of your Patented Guitars, owned by F. Peale, Esq. I find it not only improves the quality of tone, but increases its vibration until it resembles the Harp. The admirers of the Guitar are indebted to

you for the greatest improvement ever made upon this favorite Instrument.

T. SERON,  
Cor. Spruce and Broad.

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*(From Francis Blancjour.)*

PHILADELPHIA, Jan. 16th, 1854.

GENTLEMEN—As one of those invited to be present at the examination of your Patented Improvement for the Guitar, on Friday evening last, I cheerfully express to you through this medium the impression I received. After a careful investigation of the new principle you have applied, for the purpose of producing not only far greater power, but a brilliancy and sweetness of tone never before obtained from this Instrument, I find your Improvement has entirely removed the greatest drawback it has ever had: I refer to the necessity that has always existed in the old manner of constructing the sound-board, rendering it positively necessary to brace and check the very part of the Instrument that should have been left free to vibrate. By the removal of the above difficulty, you have imparted a power for vibration which gives a full, clear, and continuous tone. Gentlemen, believing you have at last perfected this much-neglected instrument, I hope the Musical World will honor you with that patronage you so richly merit.

FRANCIS BLANCJOUR,  
Professor and Teacher of the Guitar.

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*(From J. E. Gould, Esq.)*

PHILADELPHIA, January, 1854.

GENTLEMEN—I have just received the lot of Guitars and Violins which I sent on for your Improvement, all

in good order; and I would add, that they surpass in tone any Instruments that I have ever heard. We are now getting ready to send on for improvement another lot of Guitars; among them you will find three of "Martin's"—the rest of different manufacturers—all of which you will please return as early as possible, as the demand is increasing, and we do not wish to be left without an assortment.

Respectfully yours,

J. E. GOULD,  
164 Chesnut-street.

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## NEW YORK.

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At the Fair of the *American Institute*, we were honored with the "Prize Medal" for the *best toned* Guitars.

We also received the same year the "Highest Medal" for our improved Violins, over all others. This makes the second "Prize Medal" we have received for the Violin.

The following Testimonials from Musical Firms, Professors, and Amateurs, effectually establishes the fact, that Tilton's Improvement has *really* and *satisfactorily* answered the expectations of the gentlemen whose signatures they bear.

We call particular attention to the following, from one of our most distinguished Professors:

NEW YORK, March 1st, 1854.

WM. B. TILTON, Esq.

DEAR SIR—It is with much pleasure that I add to your list of certificates my testimony to the efficacy of your Improvement as applied to the Guitar. I have person-

ally inspected at your rooms several instruments by celebrated makers, before they were altered, and the result has been in every case a considerable accession of power, with a peculiar brilliancy to the small *E* string. From the ingenuity which I believe you possess, and the care and attention which I know you bestow upon the Instruments passing through your hands, I think that any Guitar sent to you for improvement cannot fail to give increased satisfaction to the owner.

I have held back this testimonial for some time, because I did not perceive the *exact* foundation of the Improvement; but having devoted a portion of my leisure to the investigation of the subject, I am now of opinion that your Improvement is founded upon correct principles; that it fulfils many conditions which have long been required by Guitar-players; and that a well-made and properly-proportioned Instrument, constructed upon the principle of your Improvement, must be *infinitely* superior to one of the old construction.

The fact that the Improvement can also be advantageously applied to the Guitars of other makers, is a matter of some interest to those amateurs who already possess a valuable instrument; and I have no doubt that the majority of dealers, as soon as they are made acquainted with the merits of the invention, will avail themselves of this opportunity of improving the quality and enhancing the value of any stock of guitars they may have on hand.

Wishing you all the success which your Improvement so undoubtedly deserves, I remain,

Yours truly,

JAMES BALLARD,

169 Third Avenue.

Professor of the Guitar, New York.

(*From Napoleon W. Gould.*)

NEW YORK, February 6th, 1854.

GENTLEMEN—Having availed myself of frequent opportunities to examine your "Patent Guitars," I feel it due to yourselves, as well as to the public, to state that they meet with my unqualified approval. It has long been a source of complaint among the Professors of the Guitar, that the sound-board of the instrument, constructed in the usual way, was too much confined in its vibrations to produce *power* as well as *sweetness* of tone; this defect I am happy to find has been effectually removed by the introduction of your Improvement, which adds strength at the same time that it gives freedom of vibration, producing a volume of tone only equalled by the rich and brilliant tones of the Harp, and certainly never before obtained on the Guitar. I hope, Gentlemen, you will meet with the success you so richly deserve, for what I consider the greatest improvement ever made upon this favorite instrument.

NAPOLEON W. GOULD,  
11 Amity-street,  
Guitarist of Christy's Minstrels.

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(*The following letter is from the late Firm of Bruno & Cargill.*)

47 MAIDEN LANE, NEW YORK,  
January 26th, 1854.

MESSRS. WM. B. TILTON & Co.

GENTLEMEN—We imported from Germany a Guitar made expressly for exhibition at the Crystal Palace. In finish it was most elaborate, but in tone quite faulty; under these circumstances we sent it to you for improvement—the result has exceeded our expectation.



This instrument now in *tone* is unsurpassed by any that has ever been in our hands—making it a truly magnificent Guitar both in quality and beauty of workmanship.

Yours, &c.,

CARGILL & Co.

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(From G. E. Bini.)

NEW YORK, Sept. 20th, 1858.

MESSRS. WM. B. TILTON & Co.

GENTLEMEN—I have thoroughly tried and examined a Guitar that you have just added your valuable Improvement to, and do not hesitate to say that the improvement is wonderful in every respect. The lovers of this Instrument have long felt the want of something that would give power and sweetness combined. Your Improvement has not only given greater power and brilliancy, but has really added to its original sweetness of tone, making it the finest-toned Guitar I have ever heard. I would here add that the above-mentioned Instrument is one that was selected by myself in Europe, expressly for my own use, some sixteen years since, but for several years past the property of Dr. John Miller. I have also had the pleasure of examining many other Instruments with your "Patent Improvement," including some of the best makers, and in all cases found a *very great* improvement in every respect. Cheerfully recommending your Instruments to all who wish a *good Guitar*,

I remain, Gentlemen,

Truly yours,

G. E. BINI,

Professor and Teacher of the Guitar.

*(From C. S. Grafulla, Professor of Music.)*

NEW YORK, August 2d, 1853.

GENTLEMEN—In order to satisfy myself in respect to "Tilton's Patent Improvement for Guitars, Violins, &c.," I had it applied to a very indifferent Guitar; the result was satisfactory beyond my most sanguine expectation. Having compared it with a very superior one, I found it equal, if not better in every respect; and in fact have no hesitation in saying that the principle is truly a philosophical one, and that it needs only to be tried to be universally adopted.

C. S. GRAFULLA,  
65½ Bowery.

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*(From A. J. Morales.)*

WM. B. TILTON & Co.

DEAR SIRS—I have examined your Improvement on Guitars, and it meets my entire approbation—so much so, that I send you mine (although it is a good one from the manufactory of the celebrated Martin) to have your Patented Improvement fixed to it. The Guitars hitherto used have been imperfect, not combining clearness, richness of tone, sweetness, brilliancy, and long vibration of the strings; all this you have accomplished by your improvement, and should command widely-extended favor from the admirers of the Guitar. I must observe, that besides improving the looks of the Instruments, it gives an opportunity to the Composer or Performer to introduce in a piece many musical graces in imitation of the Harp, which can be produced with the strings below the bridge. You can reflect with pride on the great desideratum you have attained; and I trust

that your labor will be amply rewarded by the public, both by increased repute and remuneration. Respectfully, I am,

Your obedient servant,

A. J. MORALES,

Professor of the Spanish Language and Literature in the New York Free Academy.

UTICA, N. Y., Jan'y 5th, 1854.

GENTLEMEN—The Guitars and Violins from you have come to hand. They are really fine-toned Instruments, and I anticipate for them a ready sale.

Yours, very truly,

JAMES BEST.

## ALBANY.

ALBANY, Sept. 1st, 1858.

MESSRS. WM. B. TILTON & Co.

GENTLEMEN—We send by to-night's Express a large box containing Guitars & Violins, to which we wish you to add your valuable Improvement, and return at your earliest convenience.

On trial, we find that the Guitars and Violins to which you have added your "Patent Improvement" have not only been greatly improved, but, from being originally common, they are now very superior toned Instruments, and very much liked by Professors.

Gentlemen, we wish you success, and remain,

Very respectfully,

BOARDMAN & GRAY.

ALBANY, Sept. 9th, 1853.

MESSRS. WM. B. TILTON & Co.

DEAR SIRs—I have carefully examined and thoroughly tried several Guitars with what is termed “Tilton’s Patent Improvement,” and am most happy in being able to say that it meets my unqualified approval.

I have long felt the need of something which would at once give greater power and preserve the sweetness of the Instrument, in both of which, allow me to say, you have admirably succeeded.

Yours truly,

HENRY TUCKER,

Teacher of Guitar, Piano Forte and English  
Ballad Singing.

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ALBANY, Sept. 9th, 1853.

MESSRS. WM. B. TILTON & Co.

GENTLEMEN — We have received the Guitar of “Schmidt & Maull’s” make, which we sent to have your “Patent Improvement” added. Previous to sending, we had it thoroughly tried by several Professors of the Guitar, who now pronounce your valuable discovery a very great improvement, both in regard to the power and sweetness of tone.

Very respectfully yours,

BOARDMAN & GRAY.

I had the pleasure of trying the Instrument mentioned above, both before and after it was submitted to the hands of Tilton & Co., and am happy to attest to the above commendation.

HENRY TUCKER,

Professor and Teacher of the Guitar,  
Albany.

ALBANY, Oct. 28th, 1853.

MESSRS. WM. B. TILTON &amp; Co.

GENTLEMEN—After having thoroughly tested your "Patent Improvement" for the Guitar, which I had added to my own Instrument some weeks since, I must acknowledge its effects have surpassed my most sanguine expectations. The Guitar was already a superior one, of the celebrated "Martin's" make,—so much so that I deemed it susceptible of only trifling, if any, improvement; but I find that the addition has materially increased the volume and improved the quality of its tone, and besides, has equalized the tone of all the strings, which has long been a desideratum with those who play upon this Instrument.

Very respectfully yours,

T. C. HENSHAW,

Professor of the Guitar.

ALBANY, Nov. 28th, 1854.

GENTLEMEN—I have examined carefully the principle of Tilton's "Patent Improved Guitars," and thoroughly tested and compared one of his Instruments with one of "Martin's" celebrated Guitars, that I own, which is a superior Instrument, and am constrained to admit that, in every respect, "Tilton's" are far the best.

Yours respectfully,

HENRY GOOLD,

Professor and Teacher of the Guitar and Piano  
Forte, 47 South Pearl-street.

We have also received from the Committee of the County Fair, at Albany, the following award :

## GUITARS.

The premium (a gold medal) is awarded to William B. Tilton & Co.'s Guitars, exhibited by Boardman & Gray, for their power, volume, and sweetness of tone; also their exquisite finish; and we do most heartily approve of the Patent Improvement, founded as it is on mechanical principles, by which clearness and more power are added to the natural tone of the Guitar.

GEO. WM. WARREN.

ALBERT H. WOOD.

September 28, 1854.

HENRY TUCKER.

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WASHINGTON, & c.

WASHINGTON, D. C., August 9, 1854.

JOHN F. ELLIS, Esq.

DEAR SIR—At your request, I have carefully examined the "Tilton Improved Guitar," and I cheerfully express to you the impression I have received. I find the Improvement has entirely removed the greatest drawback the Guitar has ever had: I refer to the necessity that has always existed, in the old manner of constructing the sound-board, of bracing and checking the very part of the instrument that should have been left free to vibrate. By the removal of the above difficulty, there has been imparted a power for vibration, which gives a full, clear, and continuous tone. I am truly delighted

that at last this much-neglected instrument has been perfected.

Truly yours,  
M. PEREZ,  
Professor of the Guitar, Washington City.

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WASHINGTON CITY, D. C., August 12, 1854.

JOHN F. ELLIS, Esq.

SIR—With great care and many doubts, I have examined Tilton's Patent Improvement on the Guitar, and do not hesitate to say that it is an astonishing improvement, and shall in future advise my pupils in their favor.

Yours, &c.,  
J. ANDRIA JARDELLA,  
Professor of Music.

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CUMBERLAND, Md., August 9, 1854.

MESSRS. WM. B. TILTON & Co.

GENTLEMEN—I received by Adams & Co.'s Express the box containing the Violins sent to you for improvement.

I am much pleased with the effect of the Improvement—the sounds from the better one being now rich and full, and the E string, which used formerly to *screech*, is now perfectly smooth. The other is greatly improved in brilliancy, which was sadly wanting before.

You may expect others from this place, as my friends who have tried my instruments since their return are perfectly astonished.

Yours very truly,  
A. L. HUGGINS.

LEESBURGH, Loudoun Co., Va.

J. F. ELLIS, Esq.

DEAR SIR—I have examined Tilton's Improved Violins, and with much pleasure state that I consider it a very great improvement. It increases the vibration, and gives strength and fullness to the tone.

Very respectfully, yours,

JOHN A. YOUNG,  
Professor of Music.

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NEW YORK, Oct. 6, 1854.

This morning I had the pleasure of trying a violin belonging to Mr. H. B. Dodworth, with Tilton's Improvement. In order to test its merits the more fully, I tried it with a fine old violin, and I do not hesitate to pronounce the one with the Improvement equal in all respects to the old one. So useful an Invention as this should, I think, be encouraged by all who desire a superior toned instrument. It is certainly a very great improvement, and I hope it will meet with the patronage it so richly deserves.

GEO. F. BRISTOW.

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NEW YORK, Oct. 7, 1854.

MESSERS. TILTON & Co.

GENTLEMEN—It affords me much pleasure to be able to add my testimony to that of others on the success of your excellent Improvement. First, I must express my gratification at its effect upon my own instrument. Secondly, at its wonderful effect upon a perfectly new and common Violin, which, after testing the quality of its tone and fixing by comparison in my mind, was quite



a different instrument after having the Improvement attached to it. In fact, what before gave a rough and uneven tone, now gives one of a full and beautiful quality. On the third string, in particular, there is a marked improvement. New Violins are weak and rough upon that string, which defect age alone has heretofore been able to remedy. This bad quality I noticed in the instrument previous to the application of the Improvement; but now I find it entirely removed, and the Violin plays like an old one. In conclusion, allow me to express a hope that all professors, before forming an opinion, will give the Invention a fair and impartial trial, and that it will be found in their judgment a real and valuable Improvement, as it is in that of

Yours most respectfully,

H. B. DODWORTH.

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NEW YORK, Oct. 7, 1854.

MESSRS. TILTON & Co.

GENTLEMEN—Having been present at the time Mr. Dodworth tried the common violin alluded to in the previous testimonials, I cannot but in justice say, that I give my most unqualified praise to the Improvement as attached to the Violin. At Mr. Dodworth's request, I particularly noticed the tone on the third string, before and after the Improvement had been added, and the result was, to my ear, a vast accession of power, joined to the peculiar smooth and beautiful quality of tone belonging to a good old instrument.

With much gratification, I remain,

JAMES BALLARD,

169 Third Avenue.

Professor of the Guitar and Singing.

TILTON'S  
IMPROVEMENT TO THE  
Violin.

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THE great merit of the Improvement consists in its power of imparting to any Violin, whether new or old, a quality of tone far superior to what it could otherwise be made to produce.

The Invention is founded on strictly philosophical principles, and is designed to enable Professors and Amateurs of the Violin to obtain first-rate instruments at a moderate price.

But few of the old Violins in use have sufficient power of tone to make themselves heard in the orchestra; while the new Instruments of the best quality have a hardness of tone which renders it difficult to play upon them.

This defect is remedied by Mr. TILTON's Improvement, which, without changing the form or the appearance of the Instrument, strengthens it essentially, and by supporting the sound-board in a different manner from that hitherto in use, relieves it in a great measure from the

pressure of the strings, and thus permits a far greater freedom of vibration.

Hitherto the chief support to the sound-board has been what are termed "blocks" at the ends of the Instrument, and it is obvious that its vibrating power must, under that arrangement, be greatly impeded, it being confined by so much dead-wood.

The Proprietors, in inviting the attention of the musical public to what they are able to produce, feel confident that the Improvement is one which will be of the greatest service to the art of music, and that nothing of the kind has ever been brought forward before, in connection with the Violin, so deserving the name of an *important invention*.

The great advantage of it is, that it can be applied to any Violin for a very moderate sum, and thus enables every professional Performer and every Amateur of the Instrument to *possess a good Instrument at a reasonable price*. Those who know the difficulty of obtaining good Violins, and the high prices often paid for those of but little value, can appreciate the merits of the Improvement in this particular.

Messrs. TILTON & Co. would refer to the report annexed, of a meeting held by some of the most distinguished Professors and Connoisseurs of the Violin in this country, and to the certificates which follow. No higher testimony could be given respecting the substantial merits of their Invention.

Improved Instruments always on hand, for retail or wholesale—price \$15, and upwards—and some of our cheap Instruments we are glad to compare with any that can be procured in this country for \$100.

WM. B. TILTON & Co., New York.

## TESTIMONIALS.

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On Wednesday afternoon last a number of Musicians and Amateurs assembled in the Apollo Rooms to test Mr. Tilton's Improvement on the Violin.

The meeting was called to order by Mr. Geo. Loder, and Mr. W. T. Roberts was appointed Chairman, Mr. U. C. Hill, Vice-Chairman, and Mr. G. W. Peck, Secretary.

We are compelled to condense our report, and will therefore proceed at once to the TRIAL.

The Musicians present requested Mr. Goodall to remain at one end of the large ball-room, and play such Instruments as were handed to him, while the rest of them went to the other end to listen. Three Violins were played on, when the pre-eminence was assigned to a common \$5 Violin having the Improvement, over a very old and valuable Instrument belonging to Mr. W. T. Roberts.

It being announced that this valuable Instrument was to be one of those used in the next experiment, an eminent Violinist was blindfolded, while the same melody was successively played on three different Violins by Mr. Goodall. On being desired to name the best Instrument, the umpire hesitated between Nos. 1 and 2 - No. 1 being Mr. Roberts' valuable Violin without the Improvement, and No. 2 a new \$5 Violin with it. One of those rich-toned Instruments, sold for something like \$10 per dozen, having had the Improvement applied, was then played

on, and Mr. Roberts declared he had frequently known professional players to use worse Instruments.

Suffice it to say, that the effect of the Improvement was tested in every way that could be thought of, and the party adjourned to the small room, and again organized the meeting. Mr. Hill, Mr. Roberts, and Mr. Loder each stated the experiments they had tried, and the meeting were fully satisfied that the Improvement effected by the alteration proposed by Mr. Tilton was *great and permanent*, and on motion of Mr. Loder, seconded by Mr. Goodall, it was unanimously

*Resolved*, That the meeting do heartily approve of the Invention of Mr. Tilton, and endorse its usefulness, its applicability to the Violin, and the fact of its rendering the tone clearer, fuller, and of the quality and freedom of vibration of an old and valuable Italian Instrument.

*Resolved*, That the thanks of this meeting be given to Mr. Tilton for his kindness in presenting this valuable Invention to the attention of the gentlemen present.

These resolutions were signed by the following

|                |             |                |
|----------------|-------------|----------------|
| W. T. Roberts, | Hegelund,   | Pfort,         |
| G. Loder,      | Bergner,    | Wiese,         |
| U. C. Hill,    | Daga,       | Harrington,    |
| F. Griebel,    | Le Bianco,  | Lenhard,       |
| W. Goodall,    | Hotchstein, | D. M. Cole,    |
| W. Gieb,       | F. H. Nash, | J. C. Scherpf, |
| G. W. Peck,    | Sedia,      | And others.    |

—*Musical Times.*

LONDON, Dec. 17, 1851.

Having been applied to to test the recent Invention of Mr. W. B. Tilton for an improved method of constructing Violins and other musical Instruments, we applied it to a Joseph Guarneri's Violin, valued at two hundred guineas, to an ordinary Violin, and to a Tenor. The result was in each case satisfactory beyond our most sanguine expectations; it gives freedom, power, and brilliancy to the tone, without interfering in any way with the external appearance of the Instrument, and we have no hesitation in saying that it must be universally adopted.

EDWARD WITHERS & Co.,  
Musical Instrument Makers to Her Majesty,  
Coventry-street, London.

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LONDON, April 6th, 1852.

I have had Mr. Tilton's Invention applied to my Violins, and have great pleasure in stating the result to be a great improvement in the tone of the Instruments, both with regard to quality and power.

BERNHARD MOLIQUE.

BERNHARD MOLIQUE.

(*From Ellis' Musical Journal, Manchester, England.*)

This Artist has been twenty-three years Director of the Royal Chapel, and Violinist to the King of Wirtemberg, at Stutgard. Alternately with Lindpainter, the operas and concerts at Stutgard were conducted by Molique, and during his annual *congré*, the latter occasionally visited the various capitals of Europe. In 1846,

we met him in Vienna, and heard one of his chamber Trios, performed at a reception of parties given by Beethoven's publisher—Haslinger. The political turbulence of Germany, so inimical to the peaceful Sons of Harmony, induced Molique to quit Stutgard for London three years ago. Steadfastly pursuing the honorable path of a true artist, not deigning to prostitute his talents for mere lucre, Molique wins the respect and affection of a large circle of friends, and, as a proof of his talents being elsewhere appreciated, we have only to notice the fact of his having thrice played with Hallé, at Manchester, during the present season of classical concerts, in that city of Merchant Princes.

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I have examined a number of Mr. Tilton's Improved Violins, have tried them in my orchestra, and have no hesitation in saying that his Attachment is a most valuable improvement, giving a brilliancy and quality of tone hitherto only acquired by age.

W. T. ROBERTS,  
Musical Director, Broadway Theatre.

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NEW YORK, Oct. 8th, 1851.

GENTLEMEN—Having had an opportunity of inspecting several of your improved Violins, I take great pleasure in saying that I consider them far superior to any Instruments of their class I ever saw. Indeed, I am astonished at the result of your invention; that any thing could be done to improve upon the old Violin, after such old makers as the "Amatis," takes me by a surprise I was not prepared for. But I am convinced you have done it, and I cannot forbear to express as much, and to ex-

press to you, in this way, both my pleasure and gratitude.

MORRIS HIGGINS.

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I have examined and tried Mr. W. B. Tilton's Improvement to the Violin, and am greatly pleased with it, and do not hesitate to pronounce it a real improvement, and one that may be added safely, and with great advantage, to an old or new Instrument.

U. C. HILL.

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I have examined a number of Violins with Mr. Tilton's Improvement, and have had it applied to a valuable Instrument of my own, and am greatly pleased with the result. The effect in all cases is greatly to increase the vibration, and give strength and fulness to the tone. It may be applied to any Instrument, new or old, with decided advantage.

HENRI APPY,

Solo Violinist to the King of Holland.

New York, Jan. 19, 1852.

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DURHAM, Ct., July 26th, 1858.

WM. B. TILTON & Co.

GENTLEMEN—I am so well satisfied that your Attachment is a valuable improvement to the Violin, that it seems but just I should acknowledge it to you. My Instrument is not at all what it was before I placed it in your hands. I know nothing of its value, and care nothing about it, as I use it merely for my own gratification and that of my children; but \$50 would be no inducement to me to have it made what it was before you improved it. Every stop is now perfect, and the vibra-



tions of the strings are felt distinctly by the finger at all the stops. There was a want of vibration in the fourth string, which is now remedied. Indeed I do not know where it is not what it should be. I am so well pleased with what you have done, that I would not use a Violin without having it first improved with your Patented Attachment.

Yours respectfully,

DAVID LYMAN.

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### IMPROVEMENT OF THE OLD VIOLIN.

*(From the Pickens (Ala.) Republican, of May 10.)*

For more than two hundred years the Violin has remained unchanged. Improvements have been made in almost every other musical instrument; but the Violin of to-day is the same in form, size, and make with the Cremonas of 1660. In the seventeenth century the three Amati were the most celebrated makers of the Violin. Straduarius and Guernarius succeeded these, and, great as has been their success, they have singularly lost sight of one of the first principles of the correct Violin.

Sir Richard Phillips, the collater of "A Million of Facts," says: "The Violin is the form of Instrument which all men would adopt when seeking to produce vibrations." Perfect uniformity, and an absence of any substance tending to impede the vibrations, are essential requisites to the production of a full, clear, mellow, round tone.

Our townsman, Mr. William B. Tilton, in experimenting upon an old Violin, was struck with the idea of improving the sound, both in tone and volume, by removing the cause which, in his opinion, impeded the

vibration. He made the attempt, and succeeded. Determining to test his Improvement by the severest scrutiny, he took several of his improved Violins to New Orleans, placed them under the inspection of the most eminent Musicians in that city, explained the nature of his Improvement, and received the highest assurance of the value of his invention.

To satisfy our own mind, we left with Mr. Tilton an excellent Instrument, with full authority to use it as his own in testing the Improvement. The Violin is well known in this place, and all who have heard its sound declare that it has been benefited at least one hundred per cent.—*West Alabamian*.

The above (says the Republican) is no exaggeration of the wonderful and ingenious discovery which our fellow-townsmen has made, as to the means of increasing and improving, in both volume and quality, the tones of the Violin. The subjoined extract from a letter to us, written by a very scientific Musician in New Orleans, to whom we gave Mr. Tilton an introductory note, is confirmatory of the above statement of the West Alabamian, if it needed confirmation :

“NEW ORLEANS, April 4, 1851.

“DEAR SIR—I avail myself of the present opportunity to speak favorably of Mr. Tilton's Improvement.

“I confess I had strong doubts of its practicability, but nevertheless left myself entirely free to be convinced. The experiments he made here so far satisfied me, as to induce me to permit him to attach the Improvement to B.'s Violin. The result has greatly exceeded my expectations.

“It will afford me pleasure, therefore, to use all the

influence I possess in recommending it to the public notice and favor.

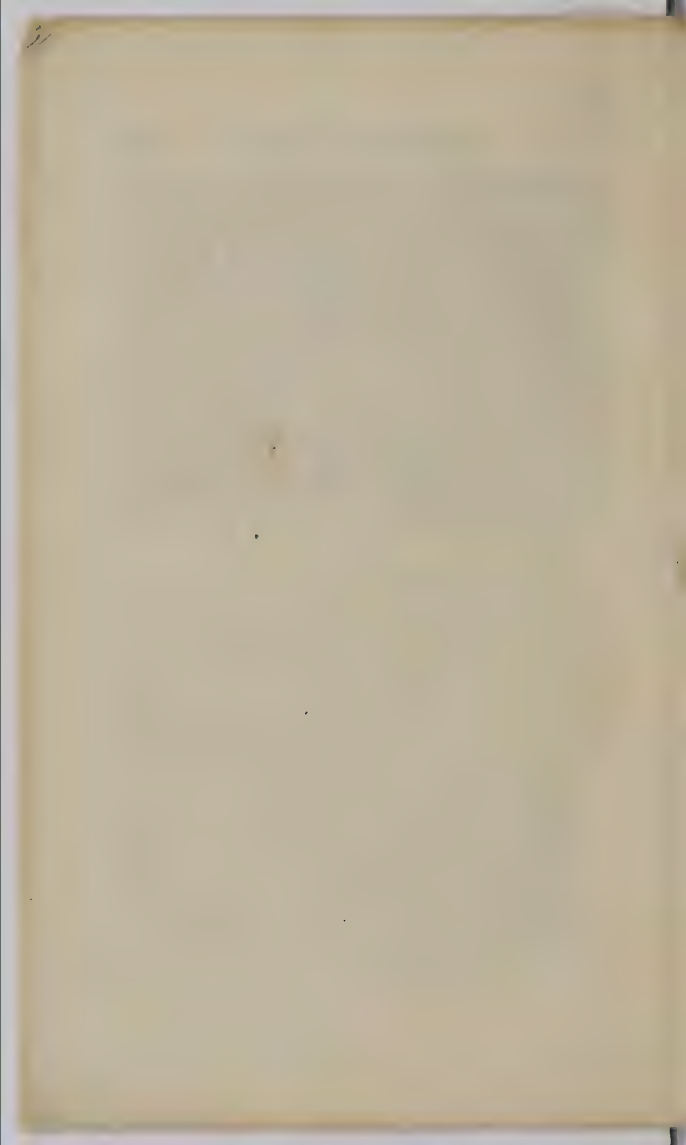
"Mr. Tilton feels such confidence in his invention that he challenges the production of any Violin that he cannot improve one hundred per cent. He also challenges the production of Violins of anybody's manufacture, old or new Instruments, Cremonas or imitations, whether those rare and genuine *heirlooms* now and then met with and so highly valued, or their best counterfeits, with their 1660, 1698, 1716, &c. dates, to compare in the quantity and quality of tone, upon a fair test with some of his Improved Violins. We have no hesitation in predicting that this discovery will introduce a new era in the history of this most copious and exquisite of all musical instruments.

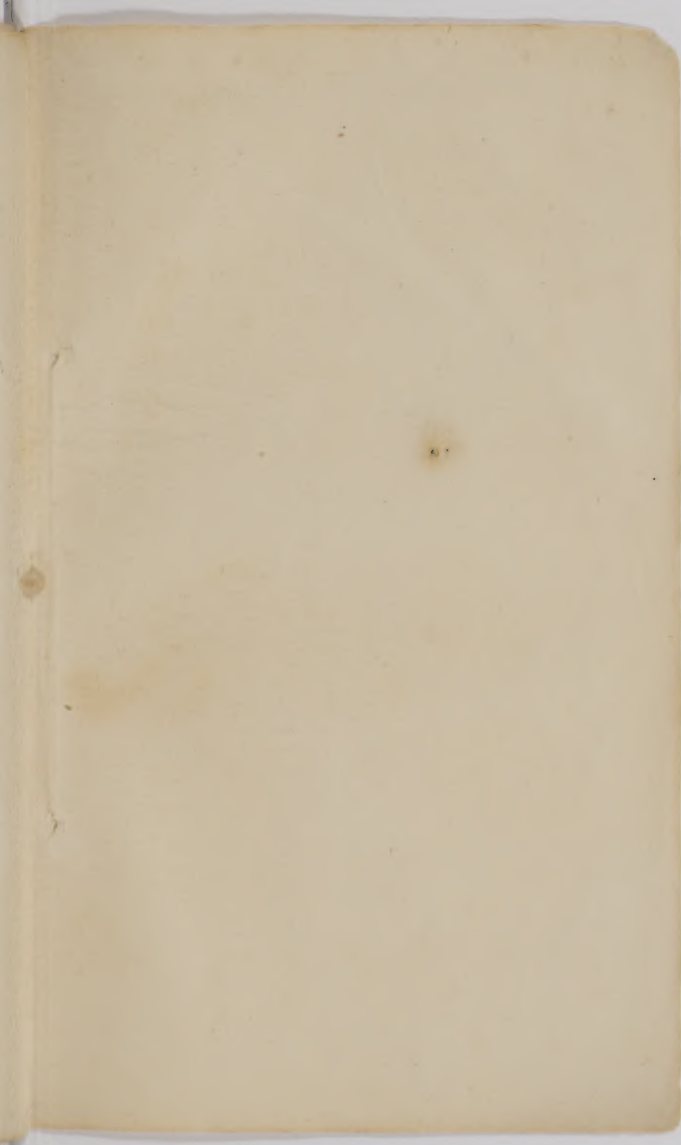
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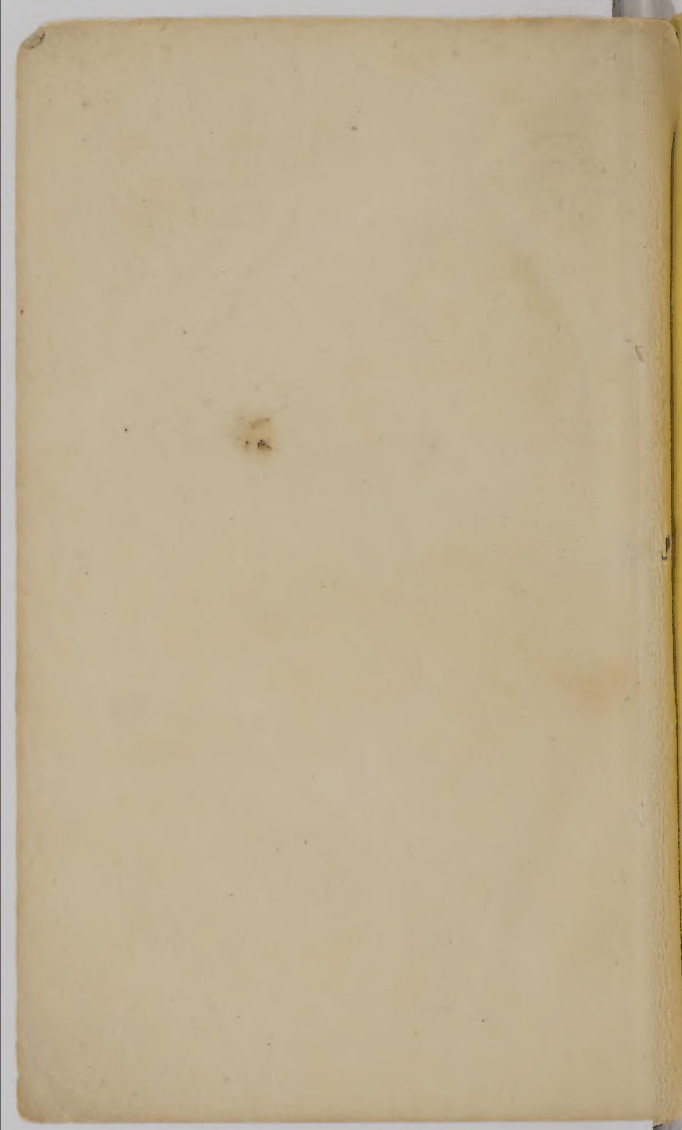
*(From the N. Y. Tribune.)*

GREAT IMPROVEMENT IN VIOLINS. — We announced in a late list of patent issues, that Wm. B. Tilton of Carrollton, Ala., had patented a new Invention in the construction of Violins and Violoncellos, &c., whereby he claims to have greatly improved the old Violin in its tones, both as to volume and quality. Mr. Tilton has lately visited the cities of Washington, Charleston, and New Orleans, in which places he received much encouragement from distinguished Musicians, after the most rigid examinations and tests, particularly in New Orleans, of his Improvement. We have noticed that the Press of those cities made very favorable mention of the Invention. This is the first Patent ever taken out which claimed to improve the tones of that Instrument, and we are aware of but a single grant of Letters Patent, in this or any other country, upon the Violin.

The Instrument has been stationary for two hundred years, and has been considered as having attained to its highest degree of perfection in the hands of the three celebrated Amati, since whom the most successful makers, with perhaps the exception of Steiner (their pupil), have been the best imitators. If, in this day of invention, it has fallen to the good fortune of one of our countrymen to improve the Violin, as above alleged, we set it down as another evidence of our superiority in skill and ingenuity over the "rest of mankind." We hope our musical friends will give the Inventor a fair opportunity to prove to them what he is satisfied of himself, and what he believes he can easily make clear to the *reasonable*, viz.: that his discovery is a great improvement upon the old Violin.







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Fig. 1.

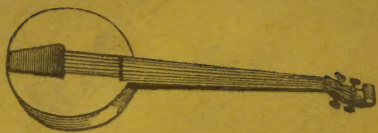


Fig. 2.



Fig. 3.



Fig. 4.

